# REMEDIAL INVESTIGATION WORK PLAN

# for

# 13 Culver Street and 372 Riverdale Avenue
# Yonkers, New York 10705

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***Prepared for:***

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## CERTIFICATION

I, Robert Kovacs, P.G., LSRP, certify that I am currently a Qualified Environmental Professional as defined in 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 and that this Remedial Investigation Work Plan (RIWP) was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation and DER-31 Green Remediation.

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Robert Kovacs, P.G., LSRP

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## 1.0 INTRODUCTION

This Remedial Investigation Work Plan (RIWP) was prepared on behalf of Claudius Development LLC (the Requestor) for the property at 13 Culver Street and 372 Riverdale Avenue in Yonkers, New York (the site). The Requestor is submitting this RIWP concurrently with a Brownfield Cleanup Program (BCP) Application as a Volunteer under the BCP and will implement this RIWP one approved by the New York State Department of Environmental Conservation (NYSDEC).

The objective of the Remedial Investigation (RI) is to further investigate and characterize the nature and extent of environmental impacts at the site, to provide sufficient information to evaluate potential impacts to human health, and to provide sufficient information to evaluate remedial alternatives, as required. This RIWP was developed in accordance with the process and requirements identified in the NYSDEC Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation (May 2010), Title 6 of the New York Codes, Rules, and Regulations (NYCRR) Part 375, Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs (April 2023), and the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006, with subsequent updates).

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# 2.0 SITE BACKGROUND

## 2.1 Site Description

The Site has a combined area of about 1.02 acres and includes 372 Riverdale Avenue (Yonkers Tax ID 1.-129-30) and Culver Street (Yonkers Tax ID 1.-129-26) within an urban block setting in Yonkers, New York. The site is bound by residential properties, some with detached garages, to the north, Culver Park to the east, Culver Street followed by a gasoline filling station and residences to the south, and Riverdale Avenue followed by a New York State owned arterial and Nathaniel Hawthorne School to the west.

The site is currently vacant. 372 Riverdale Avenue/Lot 30 is improved by a 1-story vacant auto repair building with asphalt paved parking areas. 13 Culver Street/Lot 26 is vacant.

A site location map is provided as Figure 1, and a site plan is provided as Figure 2.

According to the City of Yonkers zoning map, 372 Riverdale Avenue/Lot30 is located within a General Business and Apartment Housing zone (BA). The City of Yonkers Department of Planning and Development indicates that the BA zone is generally intended to support mixed-use development, including retail, offices, commercial services, apartments, or residential units. 13 Culver Street is located within an Apartment House, Medium Density zone (M). The M zone is primarily intended for multi-family apartment buildings.

## 2.2 Proposed Redevelopment Plan

Development plans are in progress but are expected to include construction of a 12-story residential building with one level of sub-grade parking, one level of street-grade parking, and outdoor recreation space. A portion of the residential building will be designated as affordable housing.

## 2.3 Surrounding Property Land Use

According to the City of Yonkers Zoning Map, the site is located within an area occupied with commercial, institutional, residential, light industrial buildings and public parks. The following is a summary of surrounding property usage:

| Direction | Adjoining Properties | Surrounding Properties |
|---|---|---|
| **North** | Residential properties | Residential, commercial, and institutional properties |
| **East** | Culver Park | Residential properties |
| **South** | Culver Street followed by a gasoline filling station (380 Riverdale Avenue) and residential properties | Residential and commercial properties |
| **West** | Riverdale Avenue/NYS Arterial followed by Nathaniel Hawthorne School | Residential properties |

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Land use within a half-mile radius is urban and includes commercial, institutional, utility/transportation, residential, light industrial buildings, and public parks. The nearest ecological receptor is the Hudson River, located approximately 0.51 miles west of the site.

No schools or day care facilities are located on the site. Sensitive receptors, as defined in DER-10, within a half mile of the site include those listed below:

| Number | Name (Approximate distance from site) | Address |
|---|---|---|
| 1 | Culver Street Playground (Culver Park)<br>(about 0.05-miles east of the site) | Culver St. & Livingston Ave.<br>Yonkers, NY 10705 |
| 2 | PEARLS Hawthorne School<br>(about 0.1-miles west of the site) | 350 Hawthorne Ave.<br>Yonkers, NY 10705 |
| 3 | Apple Heart Day Care<br>(about 0.1-miles northwest of the site) | 326 Hawthorne Ave.<br>Yonkers, NY 10705 |
| 4 | Arisers Christ Tabernacle<br>(about 0.1-miles south of the site) | 350 Riverdale Ave.<br>Yonkers, NY 10705 |
| 5 | Yonkers Office for the Aging<br>(about 0.1-miles south of the site) | 435 Riverdale Ave.<br>Yonkers, NY 10705 |
| 6 | St. Peter's Child Care Center Inc.<br>(about 0.15-miles northwest of the site) | 204 Hawthorne Ave.<br>Yonkers, NY 10705 |
| 7 | Erika's Group Daycare<br>(about 0.15 northeast of the site) | 57 Radford St.<br>Yonkers, NY 10705 |
| 8 | DC Family Daycare Inc<br>(about 0.15-miles northwest of the site) | 440 Hawthorne Ave.<br>Yonkers, NY 10705 |
| 9 | Grandmas Daycare LLC<br>(about 0.15-miles north of the site) | 140 Hawthorne Ave.<br>Yonkers, NY 10705 |
| 10 | South Presbyterian Church<br>(about 0.2-miles northeast of the site) | 112 Radford St.<br>Yonkers, NY 10705 |
| 11 | Iglesia Episcopal San Andres<br>(about 0.2-miles east of the site) | 22 Post St.<br>Yonkers, NY 10705 |
| 12 | Sunnyside Daycare<br>(about 0.2-miles northwest of the site) | 472 Hawthorne Ave.<br>Yonkers, NY 10705 |
| 13 | Rising Ground<br>(about 0.2-miles northwest of the site) | 463 Hawthorne Ave.<br>Yonkers, NY 10705 |
| 14 | Unity Park<br>(about 0.25-miles east of the site) | 104 Elliott Ave.<br>Yonkers, NY 10705 |
| 15 | Saint Thomas Mar Thoma Church<br>(about 0.25-miles east of the site) | 34 Morris Crescent<br>Yonkers, NY 10705 |
| 16 | Congregation Sons of Israel Senior Nutrition Site<br>(about 0.25-miles northeast of the site) | 155 Elliot Ave.<br>Yonkers, NY 10705 |
| 17 | St. John's Riverside Hospital<br>(about 0.5-miles north of the site) | 127 S Broadway<br>Yonkers, NY 10701 |

## 2.4 Site Physical Conditions

### 2.4.1 Topography

The 2023 United States Geological Survey (USGS) 7.5-minute quadrangle topographic map for Yonkers depicts the site at an elevation of about 50 feet above mean sea level (amsl) and as generally flat with a gentle slope downward toward the west. The regional topography slopes downward toward the west and the Hudson River, which is located approximately 2,500 feet west of the site.

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2.4.2 Site Geology

According to the August 15, 2017 Phase II Limited Subsurface Investigation, the site is underlain by mostly brown and tan silt with trace fine sand to about 8 feet below grade surface (bgs) and brown and tan fine to medium sands between approximately 8 feet bgs and 20 feet bgs; however, fill containing brick, concrete, and gravel was observed at several borings. Bedrock at the site is expected to consist of Metamorphic Rocks of Sedimentary and Volcanic Origin of the Fordham Gneiss, based on 1970 The Geologic Map of New York – Lower Hudson Sheet, by Donald W. Fisher, Yngnar W. Isachsen, and Lawrence V. Rickard.

2.4.3 Hydrogeology

Surface water bodies are not present within the boundary of the site. The nearest surface water body is the Hudson River located approximately 2,500 feet west of the site. Groundwater flow can be influenced by several factors such as surface water bodies, wetlands, hydrogeologic and anthropogenic variables. Based on the August 15, 2017 Phase II Limited Subsurface Investigation, groundwater in the southwest part of the site was encountered at about 8 feet bgs. Groundwater is expected to flow west, based on topographic gradient and proximity to the Hudson River.

2.4.4 Wetlands

Wetlands were evaluated by reviewing the National Wetlands Inventory and NYSDEC regulated wetlands map. There are no designated wetlands mapped on the site.

## 2.5 Environmental History and Previous Investigations

The following previous environmental reports were prepared for the site (copies are provided in Appendix A).

Phase I and II Environmental Site Assessments/Investigations

- *Phase I Environmental Site Assessment (ESA) - Proposed CVS Pharmacy/Store No. 10386, 13 Culver Street and 372 Riverdale Avenue, prepared by T.M. Crowley & Associates, Inc., dated June 7, 2017*
- *Phase II Limited Subsurface Investigation (SSI) – Proposed CVS Pharmacy/Store No. 10386, 13 Culver Street and 372 Riverdale Avenue, prepared by Ransom Consulting, Inc., dated August 15, 2017*
- *Phase I ESA – 13 Culver Street and 372 Riverdale Avenue, prepared by Langan, dated April 24, 2026*

Environmental conditions discussed in the above reports are summarized below.

General Site History

Historical topographic maps and Sanborn maps indicate the site was developed with several residential dwellings with detached garages or stables as early as 1897. By 1917, several store

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fronts were located along Riverdale Avenue, and a Cast Stone Products building was located at the east half of 13 Culver Street/Lot 26. The Cast Stone products business was no longer present by the 1951 Sanborn map, but that portion of the lot was noted as multiple auto garages.

According to aerial photos and Sanborn maps, most of the residential structures at 372 Riverdale Avenue/Lot 30 were demolished between 1966 and 1974, and the current auto repair building was constructed by 1974. According to city directories, the building was occupied by Goodyear Tire/Auto Service. Two 3-strory residential buildings remained in the northwest part of the lot. One residential building remained in the western part of 13 Culver Street/Lot 26, but the auto garages were no longer present.

The two residential buildings in the northwest part of 372 Riverdale Avenue/Lot 30 were demolished by 1984, and the area was paved and used for parking. Goodyear continued to occupy the lot and building. One residential building remained in the west part of 13 Culver Street/Lot 26.

372 Riverdale Avenue was occupied by Goodyear until 2015 and then by West Coast Auto beginning in 2016. According to sales info on Yonkers.gov, the lot was sold from Mary Louise Romano to Dutchman Realty LLC in April 2026. The residence at 13 Culver Street/Lot 26 was demolished between 2017 and 2021. According to sales info on Yonkers.gov, the lot was sold from 15 Culver St Realty Corp to Dutchman Realty LLC in 2017 and then to Dutchmen Realty II LLC in 2024.

Petroleum Bulk Storage Registration ID 3-802158 at 372 Riverdale Avenue

A UST in relation to Petroleum Bulk Storage (PBS) Registration ID 3-802158 is listed at 372 Riverdale Avenue for a 3,500-gallon No. 2 fuel oil UST (Tank No. 1). The database included contradictory/incorrect info about Tank No. 1 (e.g. installation in 1950 and permanent closure in 1900 while also noting the tank as temporarily out-of-service). PBS Registration No. 3-802158 was still noted as "active."

Closed NYSDEC Spill No. 1710340 – Turbo Auto Sales

Spill No. 1710340 was reported on February 15, 2018, at Turbo Auto Sales when petroleum-impacted soil was encountered during removal of a 3,500-gallon No. 2 heating oil UST (Tank No. 1 discussed above) east of the garage building at 372 Riverdale Avenue. About 220 tons of impacted soil was over-excavated and disposed of offsite. Post-excavation soil samples confirmed concentrations were below NYSDEC CP-51 soil cleanup levels of fuel oil impacted soil and the spill was closed by the NYSDEC on April 16, 2018. This spill is considered a historic REC (HREC).

Open NYSDEC Spill No. 2506149 – "Mechanic Shop"

Spill No. 2506149 was reported at "Mechanic Shop" on July 31, 2025, when motor oil from auto repair operations was reportedly flowing into street drains. Case notes also stated auto repair

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was being done on streets with associated oil staining noted. The spill remains open, there is additional evidence of poor housekeeping by the former tenant and is a REC as the leaks may have infiltrated cracks in the pavement and impacted soil, groundwater, and soil vapor at the site.

Resource Conservation and Recovery Act (RCRA) Generator, Facility Index System (FINDS), and Enforcement and Compliance History Online (ECHO) databases - Small Quantity Generator (SWG) in 1986 and a very small quantity generator (VSQG) in1993, 2006, and 2007.

Waste types included ignitable waste and spent non-halogenated solvents, including xylene, acetone, ethyl acetate, ethyl benzene, methyl isobutyl ketone, N-butyl alcohol, cyclohexanone, and methanol. Violations were not reported. Undocumented releases of hazardous substances and ignitable waste may have impacted soil groundwater, and soil vapor at the site.

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RECs Identified in the Langan Phase I ESA dated April 24, 2026

The following RECs were identified by Langan:

- *Former Auto Repair Operations, Open Spill, and Evidence of Poor Housekeeping at 372 Riverdale Avenue/Lot 30:* The building has been used for auto repair by multiple tenants since 1974. Evidence of poor housekeeping (staining, standing fluids, trash, and debris) was observed at various locations throughout 372 Riverdale Avenue/Lot 30. NYSDEC Spill No. 2506149 was reported on October 7, 2025, when motor oil was reportedly flowing from the site into to street drains. Case notes also indicated that auto repair work was conducted on the streets with oil leaks noted. The spill case remains open. Documented and undocumented releases of petroleum products or hazardous substances related to auto repair may have impacted soil, groundwater, and soil vapor.
- *Hazardous Waste Generation – Auto Service Center at 372 Riverdale Avenue/Lot 30:* Lot 30 was identified as a SQG in 1986 and a conditionally exempt small quantity generator (CESQG) in 1993, 2006, and 2007 of hazardous waste containing ignitable waste and spent nonhalogenated solvents including xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol. Manifests indicate hazardous waste shipments continued through 2012. No violations or non-compliance issues were reported and the listing was not reclassified as a non-generator. Undocumented releases of hazardous substances or hazardous waste may have impacted regional environmental conditions in the vicinity of the site.
- *Documented Contamination at Site:* An August 15, 2017 Phase II Limited Subsurface Investigation identified groundwater impacted with petroleum related volatile organic compounds (VOCs) at concentrations above NYSDEC Technical Operational and Guidance Series Ambient Water Quality Standards and Guidance Values (SGVs) and fill with metal and semivolatile organic compounds (SVOCs) at concentrations above NYSDEC Restricted Use Restricted Residential Soil Cleanup Objectives (RURR SCOs).
- *Current and Historical Use of Adjoining and Nearby Upgradient Properties and Related Open Spills:* Adjoining and/or nearby upgradient properties have been occupied by gasoline filling stations (1951- present) and a plastics manufacturer identified as a potential handler of PFAS. Two open petroleum spills are associated with the gasoline filling station at the south adjoining property at 380 Riverdale Avenue with "significant" impacts to groundwater, according to the NYSDEC case notes. Documented and undocumented releases at these sites may have impacted regional environmental conditions in the vicinity of the site.

Previous Environmental Sampling

A summary of environmental features and documented soil and groundwater contamination from the Phase II Limited SSI conducted by Ransom Consulting, Inc is provided below.

*Geophysical Survey*

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A geophysical survey was conducted in June 2017. Anomalous findings, as interpreted by the geophysical surveyors, are summarized below:

- A backfilled excavation in the southeast part of 372 Riverdale Avenue/Lot 30, which was assumed to be the location of the former 550-gallon waste oil UST.
- A UST-like anomaly east of the main garage (confirmed in 2018 to be a 3,500-gallon fuel oil UST removed during remediation of Spill No. 1710340).
- The geophysical survey attempted camera mapping of the drainage system but was unable to do so because of built-up sediment at clean outs.

*Soil*

25 soil borings were installed (24 at 372 Riverdale Avenue/Lot 30 and 1 at 13 Culver Street/Lot 26) and 30 soil samples were collected as part of the Phase II Limited SSI. Petroleum-like odors and photoionization detector (PID) readings of up to 6.8 parts per million (ppm) were noted in soil boring SB-23 in the southwest corner of the parking lot at 372 Riverdale Avenue/Lot 30; however, staining was not observed. VOCs were either not detected or reported at concentrations below the Soil Cleanup Objectives (SCOs). Several metals and SVOCs were reported at concentrations above NYSDEC Part 375 Unrestricted Use (UU) and Restricted Use Restricted Residential (RURR) SCOs. Polychlorinated biphenyls (PCBs) and pesticides each exceeded UU SCO in one sample, but not RURR SCOs.

NYSDEC revised Part 375 SCOs in December 2025. Langan compared the data against the new SCOs, and the following SCO exceedances were documented:

- The VOC acetone in one soil sample in the northwest parking lot of 372 Riverdale Avenue/Lot 30;
- Several SVOCs above UU and/or RURR SCOs at various locations throughout the site between 0 and 1-foot bgs;
- Several metals above UU and/or RURR SCOs at various locations throughout the site at varying intervals to a max depth of 7.5 feet bgs; and
- PCBs and pesticides are each in one sample above UU SCOs, but below RURR SCOs.

Previous soil sample locations and analytical results are presented in Figure 3.

*Groundwater*

Two temporary monitoring wells were installed in the southwest corner of 372 Riverdale Avenue/Lot 30, and one groundwater sample was collected from each well as part of the Phase II Limited SSI. Analytical results identified several petroleum-related VOCs above SGVs. Reported VOC concentrations were 2 to 3 orders of magnitude above the SGVs. The wells were noted by Ransom as "upgradient" to assess potential impacts from off-site; however, the west

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side of the site is at lower elevation than the east. The wells were located cross gradient from the south adjoining gasoline filling station across Culver Steet from the site.

Previous Groundwater Sample Location and Analytical Results are presented in Figure 4.

### 2.6 Areas of Concern

Based on the site history and the findings of previous studies, the areas of concern (AOCs) to be further investigated by this RI are shown in Figure 5 and are described below.

**AOC 1: Historical Site Operations, Open NYSDEC Spill No. 2506149, and Evidence of Poor Housekeeping**

The building at 372 Riverdale Avenue/Lot 30 has been used for auto repair by multiple tenants since 1974. The most recent tenant vacated in April 2026 and evidence of poor housekeeping (staining, standing fluids, trash, and debris) was observed at various locations throughout 372 Riverdale Avenue/Lot 30. New York State Department of Environmental Conservation (NYSDEC) Spill No. 2506149 was reported on October 7, 2025, when motor oil was reportedly flowing from the site into to street drains. Case notes also indicated that auto repair work was conducted on the streets with oil leaks noted. The spill case remains open. Documented and undocumented releases of petroleum products or hazardous substances related to auto repair may have impacted soil, groundwater, and soil vapor.

**AOC 2: Hazardous Waste Generation**

Lot 30 was identified as a SQG in 1986 and a CESQG in 1993, 2006, and 2007 of hazardous waste containing ignitable waste and spent nonhalogenated solvents including xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol. Manifests indicate hazardous waste shipments continued through 2012. No violations or non-compliance issues were reported. Undocumented releases of hazardous substances or hazardous waste may have impacted soil groundwater, and/or soil vapor at the site.

**AOC 3: Documented Soil and Groundwater Contamination**

An August 15, 2017 Phase II Limited Subsurface Investigation identified groundwater impacted with petroleum related VOCs at concentrations above NYSDEC SGVs and fill with metals and SVOCs at concentrations above NYSEC RURR SCOs.

**AOC 4: Current and Historical Use of Adjoining and Nearby Upgradient Properties and Related Open Spills**

Adjoining and/or nearby upgradient properties have been occupied by gasoline filling stations (1951- present) and a plastics manufacturer identified as a potential handler of per- and polyfluoroalkyl substances (PFAS). Two open petroleum spills are associated with the gasoline filling station at the south adjoining property at 380 Riverdale Avenue with "significant" impacts

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to groundwater, according to the NYSDEC case notes. Documented and undocumented releases at these properties may have migrated and impacted groundwater and/or soil vapor at the site.

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## 3.0 SCOPE OF WORK

The objective of this RIWP is to supplement existing data to investigate and characterize "the nature and extent of the contamination at and/or emanating from a brownfield site," as required to satisfy New York Environmental Conservation Law 27-1411.1.

The field investigation will include the tasks summarized below, which are discussed in more detail in the following sections. The rationale for each sampling location, in relation to the AOCs and analytical parameters for each proposed sample, is provided in Table 1.

*Geophysical Survey*

- Perform a geophysical survey to locate USTs, underground structures, geophysical anomalies, and utilities across accessible areas of the site, including in the vicinity of proposed sampling locations and in previously inaccessible areas of the site.

*Soil Borings and Sampling*

- Advance at least 14 soil borings (RISB-01 to RISB-14) to 20 feet bgs, the groundwater interface, or the termination of observed contamination (whichever is deeper). Note, borings will not be advanced into bedrock, and will be terminated at bedrock refusal. If petroleum-related impacts are observed, the vertical and horizontal extent of these impacts in overburden will be delineated by advancement of additional soil borings.
- Collect of up to three soil samples from each boring (plus quality assurance/quality control [QA/QC] samples) for laboratory analysis to further characterize and delineate the nature and extent of soil contamination at the site.

*Monitoring Well Installation and Sampling*

- Install and develop at least 11 permanent monitoring wells (MW-01, MW-02, MW-06, MW-07, MW-08, MW-09, MW-10, MW-11, MW-12, MW-13, and MW-14).
- Collect one groundwater sample from each monitoring well (plus QA/QC samples) for laboratory analysis to further evaluate groundwater quality across the site and delineate known impacted areas.
- Survey and gauge monitoring wells to evaluate groundwater elevations and flow direction and the potential presence of non-aqueous phase liquids (NAPL).

*Soil Vapor/Sub-slab Soil Vapor/Indoor Air Sampling*

- Install seven sub-surface soil vapor sampling points (SV-01, SV-02, SV-04, SV-06, SV-07, SV-12, and SV-14) to five feet bgs or two feet above the observed groundwater table; whichever is shallower.
- Install two sub-slab soil vapor sampling points (SSV-08, SSV-10) immediately below the existing building slab, each coupled with a co-located indoor air sample.
- One outdoor, ambient air sample (AA01)

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Modifications to this scope of work may be required: 1) due to site operations, equipment, or restrictions; 2) if unexpected contamination is detected and additional analytical data is needed to characterize the site; and 3) to confirm that impacts are adequately characterized and delineated in compliance with the Brownfield Law, regulations, and applicable investigation guidance documents (e.g., DER-10). NYSDEC and NYSDOH will be contacted to obtain approval for these modifications, and all modifications will be reflected in the Remedial Investigation Report (RIR).

The field investigation will be completed in accordance with the procedures specified in Langan's Health and Safety Plan (HASP) and Quality Assurance Project Plan (QAPP) provided in Appendices B and C, respectively. A Community Air Monitoring Plan (CAMP) will be implemented during this investigation (see Section 3.8.2 and Appendix D).

The names, contact information and roles of the principal personnel who will participate in the investigation are listed below. Résumés for Langan employees involved in the project are included in the QAPP (Appendix C).

| Personnel | Investigation Role | Contact Information |
|---|---|---|
| Robert Kovacs<br>Langan Engineering | Qualified Environmental Professional and Quality Assurance Officer | Phone – 934-237-1319<br>Email – rkovacs@langan.com |
| Gerald Nicholls, PE, CHMM<br>Langan Engineering | Engineer of Record | Phone – 212-479-5559<br>Email – gnicholls@langan.com |
| Emily Butler<br>Langan | Project Manager | Phone – 212-479-5462<br>Email ebutler@langan.com |
| Connor Moore<br>Langan Engineering | Field Team Leader | Phone – 212-479-5512<br>Email – cmoore@langan.com |
| Tony Moffa, CHMM<br>Langan Engineering | Langan Health & Safety Officer | Phone – 215-491-6500<br>Email – tmoffa@langan.com |
| Bill Bohrer, PG<br>Langan Engineering | Field Safety Officer | Phone – 212-479-5533<br>Email – wbohrer@langan.com |
| TBD | Laboratory Contractor | TBD |
| Joe Conboy<br>Langan Engineering | Program Quality Assurance Monitor / Data Validator | Phone – 609-282-8055<br>Email – jconboy@langan.com |

## 3.1 Geophysical Survey

A geophysical contractor will perform a geophysical survey to locate potential USTs, underground structures, geophysical anomalies, identify utilities across previously inaccessible areas of the site, and clear subsurface testing locations of potential subsurface obstructions. The geophysical survey will be completed using a collection of geophysical instruments, including electromagnetic and utility line locator instruments and ground-penetrating radar (GPR). The results of the survey may require relocating subsurface testing locations.

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## 3.2 Soil Investigation

3.2.1 Soil Boring Installation

The drilling subcontractor will advance at least 14 soil borings to further investigate the AOCs identified in Section 2.6. Borings will be advanced to 20 feet bgs, the groundwater interface, or to the termination of observed contamination (whichever is deeper). Borings will not be advanced into bedrock, and will be terminated at bedrock refusal. A plan showing the proposed sample locations is included as Figure 5, and a summary of the proposed laboratory analyses for each sample is included as Table 1. The following table associates borings and/or monitoring wells with AOCs and describes the rationale for each.

| AOC | Associated Soil Boring(s), Probes, and Monitoring Wells | Rationale |
|---|---|---|
| AOC 1 | RISB/MW/SV-01, RISB/MW/SV-02, RSB-03, RSB/SV-04, RISB/MW/SV-07, RISB/MW/SV/IA-08, RISB/MW-09, RISB/MW/SV/IA-10, RISB/MW-11, RISB/MW/SV-12, RISB/MW-13, RISB/MW/SV-14 | Investigate areas of historical operations |
| AOC 2 | RISB/MW/SV-01, RISB/MW/SV-02, RSB-03, RSB/SV-04, RISB/MW/SV-07, RISB/MW/SV/IA-08, RISB/MW-09, RISB/MW/SV/IA-10, RISB/MW-11, RISB/MW/SV-12, RISB/MW-13, RISB/MW/SV-14 | Investigate areas of waste storage |
| AOC 3 | All borings and monitoring wells | Investigate areas of petroleum-related impacts observed during previous investigations |
| AOC 4 | All borings and monitoring wells | Investigate current and historical use of adjoining and nearby upgradient properties and related open spills |

Soil borings will be advanced using direct-push drilling technology. The direct-push drill rig will be equipped with a closed-point Macro-Core sampler to prevent the collapse of sidewall material

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as borings are advanced. Langan personnel will document the work, screen soil samples for environmental impacts, and collect representative environmental soil samples for laboratory analyses. Soil will be screened continuously to the boring termination depth for organic vapors with a PID equipped with a 10.6 electron volt (eV) bulb and for visual and olfactory evidence of environmental impacts (e.g., NAPL, staining, odor). Soil will be visually classified for color, grain size, texture, and moisture content, and will be recorded in a field log. Site operations will comply with the safety guidelines outlined in the HASP in Appendix B. Non-disposable, down-hole drilling equipment and sampling apparatus will be decontaminated between locations with Alconox and water. Water used for decontamination and rinsate will be containerized into United Nations/Department of Transportation (UN/DOT)-approved 55-gallon drums, labeled, and staged for off-site disposal.

### 3.2.2 Soil Sampling and Analysis

A minimum of three soil samples will be collected for laboratory analysis from each soil boring. The following intervals will be targeted:

1. Shallow soil samples from within the top two feet of recovery, and a sample will be collected from the terminus of soil with apparent anthropogenic impacts (e.g., anthropogenic materials, construction and demolition debris), if observed above the groundwater interface;
2. The interval exhibiting the greatest degree of impacts, if encountered, or the groundwater interface; and
3. The one-foot interval below the vertical extents of impacts, if encountered.

Depending on the site conditions (e.g., fill depth, presence/absence of impacts) and recovery, the number of samples collected at each boring may vary.

If petroleum-related impacts are observed in any boring, additional overburden soil samples supporting a horizontal and vertical delineation will be collected.

Soil samples will be collected in laboratory-supplied containers and will be sealed, labeled, and placed in a chilled cooler (to attempt to maintain a temperature of <4°C) for delivery to a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory. Soil samples will be analyzed for the following using the latest USEPA methods as specified below:

- 6 NYCRR Part 375 VOCs by USEPA Methods 8260;
- 6 NYCRR Part 375 SVOCs by USEPA Method 8270, including 1,4-dioxane;
- PCB by USEPA Method 8082;
- 6 NYCRR Part 375 metals (including cyanide and hexavalent and trivalent chromium) by USEPA Methods 6010/7471/9010/7196;
- 6 NYCRR Part 375 Pesticides and herbicides by USEPA Methods 8081 and 8151, respectively; and

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- PFAS (40-compound list) by USEPA Method 1633.

The proposed RI soil samples are summarized in Table 1. QA/QC procedures to be followed and sampling frequency are described in the QAPP in Appendix C.

## 3.3 Groundwater Investigation

### 3.3.1 Monitoring Well Installation

Eleven permanent groundwater monitoring wells (MW-01, MW-02, and MW-06 through MW-14) will be installed using direct-push drilling technology. A plan showing the proposed well locations is included as Figure 5. As indicated in Table 1, groundwater samples from the eleven monitoring wells will be used to investigate and characterize the nature and extent of contamination associated with the AOCs.

Well installation methods for monitoring wells are presented herein:

- Monitoring wells will be constructed using 2-inch-diameter, threaded, flush-joint, polyvinyl chloride casing, and 10-foot-long, pre-packed well screens that will terminate about 5 feet below the observed groundwater table. Clean sand (e.g., Morie No. 2) will be used to fill the minimum 2-inch-thick annulus around the screen up to about 2 feet above the top of the screened interval, including to 6 inches below the screen. A 2-foot-thick bentonite seal will be installed above the sand, and the remaining borehole annulus will be backfilled with drill cuttings with no evidence of chemical or petroleum impacts (i.e., staining, odors, or PID readings above background conditions) to within 12 inches of the surface and/or grouted to the surface with a bentonite and cement slurry. Monitoring wells will be finished at the surface with flush-mounted access covers.

After installation, the wells will be developed by surging using either a weighted bailer or surge block across the well screen and casing to agitate and remove fines. After surging, the well will be purged via pumping until the water becomes clear (having turbidity less than 50 Nephelometric Turbidity Units). The wells will then be allowed to equilibrate for a minimum of one week before collecting groundwater samples.

### 3.3.2 Groundwater Sampling and Analysis

Before sampling, the headspace of each well will be measured with a PID. Because groundwater samples will be analyzed for PFAS, wells will be gauged with an interface probe to determine the depth to groundwater and thickness of any NAPL after groundwater samples are collected and the water table elevation stabilizes to avoid potential cross contamination. If NAPL is encountered, representative samples of the product will be collected for laboratory fingerprint analysis. If NAPL is observed on purged groundwater prior to sampling, groundwater samples will not be collected from monitoring wells that contain NAPL.

One groundwater sample will be collected from each of the 11 monitoring wells as summarized in Table 1. Prior to sampling, one round of synoptic gauging for static water levels will be

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performed and the monitoring wells will be purged. Purging will consist of pumping, at a minimum, the stabilized drawdown volume plus the pump's tubing volume, and waiting until the physical and chemical parameters (e.g., temperature, dissolved oxygen, oxygen reduction potential, turbidity) stabilize within the ranges specified in the USEPA's Low Stress Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells (dated 30 July 1996, and 4th revision 19 September 2017). If physical and chemical parameters do not stabilize within one hour of purging, sample collection will proceed. Samples will be collected with a submersible pump and dedicated polyethylene tubing (or similar pump apparatus). Non-disposal components of the pump will be decontaminated with Alconox and water between each sample location. Development and purge water will be containerized for off-site disposal.

Groundwater samples will be collected in laboratory-supplied containers and will be sealed, labeled, and placed in an ice-chilled cooler (to maintain a temperature of approximately 4°C) for delivery to the laboratory. Groundwater samples from both newly installed and existing well locations will be analyzed using the latest USEPA methods as follows:

- TCL VOCs by USEPA Method 8260;
- TCL SVOCs by USEPA Method 8270;
- PCBs by USEPA Method 8082;
- Metals (total and dissolved) by USEPA Method 6010/7470;
- Pesticides by USEPA Method 8081;
- Herbicides by USEPA Method 8151;
- NYSDEC-List PFAS by EPA Method 1633; and
- 1,4-dioxane by EPA Method 8270 with selected ion monitoring (SIM).

QA/QC procedures to be followed are described in the QAPP in Appendix C.

### 3.3.3 Monitoring Well Survey and Synoptic Gauging

Langan will survey the vertical location of the monitoring wells, including ground surface elevation and the top of well casing to the nearest 0.01 foot. Vertical control will be established by surveying performed relative to NAVD88 by a New York State-licensed land surveyor. The horizontal well locations will be established using field measurements. A synoptic gauging event will be performed after the wells are installed to document static water levels across the site. Survey data will be used to prepare a groundwater contour map depicting the elevation of the water table across the site.

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## 3.4 Soil Vapor Investigation

3.4.1 Soil Vapor and Sub-Slab Soil Vapor Point Installation

Seven temporary soil vapor points (SV-01, SV-02, SV-04, SV-06, SV-07, SV-12, and SV-14) and two temporary sub-slab soil vapor points (SSV08 and SSV10) will be installed using direct-push technology in accordance with the NYSDOH's Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006). A plan showing the proposed soil vapor and sub-slab soil vapor point locations is included as Figure 5. As indicated in Table 1, soil vapor and sub-slab soil vapor samples from each sampling location will be used to investigate and characterize the nature and extent of contamination associated with the AOCs.

Sub-surface soil vapor points will be installed by advancing a probe implant to five feet bgs or two feet above the groundwater table, whichever is shallower, and the sub-slab soil vapor points will be installed immediately below the existing building slab. Sub-surface soil vapor collection points will consist of a 1.875-inch polyethylene implant with inert sample tubing (e.g., Teflon or Teflon-lined polyethylene), and sub-slab soil vapor points will consist of inert sample tubing. The annulus (i.e., the sampling zone) around the soil vapor and sub-slab soil vapor implant and tubing will be filled with a clean, coarse sand pack followed by a hydrated bentonite seal to surface grade. Hydrated bentonite will also be used to create a seal around the tubing at the surface of the soil vapor and sub-slab soil vapor points.

Sub-slab soil vapor samples will be co-located with indoor air samples. Soil vapor and indoor air samples will be collected in accordance with the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006, with updates).

3.4.2 Soil Vapor and Sub-slab Soil Vapor Sampling and Analysis

Samples will be collected in general accordance with the NYSDOH's Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006, with updates). Before collecting vapor samples, a minimum of three vapor point volumes (i.e., the volume of the sample implant and tubing) will be purged from each sample location at a rate of less than 0.2 liters per minute using a RAE Systems MultiRAE meter set at a low flow setting. The purged vapor will be monitored for VOCs with the MultiRAE during purging.

A helium tracer gas will be used to serve as a QA/QC technique to document the integrity of each vapor point seal before and after sampling. The tracer gas will be introduced into a container, which will shroud the vapor point and seal. Helium will be measured from the sampling tube and inside the container. If the sample tubing contains more than 10% of the tracer gas concentration that was introduced into the container, then the seal will be considered compromised and will be enhanced or reconstructed to prevent outdoor air infiltration.

A log sheet for each vapor sample will be completed to record sample identification; date and time of sample collection; sampling depth; name of the field engineer, geologist or scientist

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responsible for sampling; sampling methods and equipment; vapor purge volumes; volume of vapor extracted; flow rate; and vacuum of canisters before and after sample collection.

After the integrity of each seal is confirmed, vapor samples will be collected into laboratory-supplied batch-certified clean 2.7- or 6-liter Summa canisters with calibrated flow controllers. Soil vapor samples will be collected over a 2-hour sampling period, and sub-slab soil vapor and indoor air samples will be collected over a 24-hour sampling period and analyzed for VOCs by USEPA Method TO-15.

The proposed vapor samples are summarized in Table 1. QA/QC sample collection procedures and sampling frequency are described in the QAPP in Appendix C.

3.4.3 Indoor Air Sampling

Two indoor air samples (IA08 and IA10) will be collected about 3 to 5 feet above grade concurrently with co-located sub-slab vapor samples. Prior to sample collection, an NYSDOH Indoor Air Quality Questionnaire and Building Survey will be completed to document the potential presence of equipment or chemicals that could interfere with the laboratory analytical results. The buildings will be screened with a PID that can detect organic vapors at concentrations of parts per billion during the indoor air survey.

One outdoor, ambient air sample will be concurrently collected from the breathing zone (about 3 to 5 feet above grade) to provide information regarding background air conditions. The ambient air sample will be collected into laboratory-supplied, batch-certified clean 2.7- or 6-liter Summa canisters with a calibrated flow controller over an 8-hour sampling period, concurrent with the soil vapor samples. The samples will be submitted to an NYSDOH Environmental Laboratory Approval Program-certified laboratory for analysis of VOCs via USEPA Method TO-15.

QA/QC procedures to be followed are described in the QAPP in Appendix C.

## 3.5 Sampling Contingency

Additional soil, groundwater, or vapor sampling locations may be completed, as needed, to evaluate unanticipated contamination and to horizontally and vertically delineate identified contamination (e.g., NAPL, VOCs, SVOCs, metals, or other analytes) in the overburden based on field observations and analytical results. The objective of a sampling contingency is to provide adequate delineation of AOCs during a single mobilization event, if possible. The decision to complete additional sampling and delineation (including step-out distances and target-depth intervals) based on field observations and/or preliminary (non-validated) laboratory data will be made by Langan, potentially in consultation with NYSDEC and/or NYSDOH Project Managers. The location of any step-out soil borings and additional monitoring wells will be based on field observations and analytical data from adjacent borings and wells, site access, and drilling considerations. Sampling depths and analyses will be contingent on observations/findings.

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## 3.6 Data Management and Validation

York, a NYSDOH ELAP-approved laboratory, will analyze soil, groundwater, and soil vapor samples. Laboratory analyses will be conducted in accordance with USEPA SW-846 methods and NYSDEC Analytical Services Protocol (ASP) B deliverable format. Environmental data will be reported electronically using the database software application EQuIS as part of NYSDEC's Environmental Information Management System.

Table 1 summarizes the anticipated samples and analytical methodology. QA/QC procedures required by the NYSDEC ASP and SW-846 methods, including initial and continuing instrument calibrations, surrogate compound spikes, and analysis of other samples (blanks, laboratory control samples, and matrix spikes/matrix spike duplicates) will be followed in accordance with the QAPP (Appendix C). The laboratory will provide pre-cleaned and preserved sample bottles in accordance with the SW-846 methods. Where there are differences in the SW-846 and NYSDEC ASP requirements, the NYSDEC ASP shall take precedence.

Data validation will be performed in accordance with the USEPA Region 2 Standard Operating Procedures (SOP) for data validation and USEPA's National Functional Guidelines for Organic and Inorganic Data Review, Technical and Administrative Guidance Memorandum (TAGM) Solid Waste Guidance (SW-96-09) Development and Review of Site Analytical Plans, and DER-10 Appendix 2B Section 2.0. Tier 1 data validation (the equivalent of USEPA's Stage 2A validation) will be performed to evaluate data quality. Tier 1 data validation is based on completeness and compliance checks of sample-related quality control results including:

- Holding times
- Sample preservation
- Blank results (method, trip, and field blanks)
- Surrogate recovery compounds and extracted internal standards (as applicable)
- Laboratory control samples and laboratory control sample duplicates recoveries and relative percent difference (RPD)
- Matrix spike and matrix spike duplicate recoveries and RPDs
- Laboratory duplicate RPDs
- Field duplicate RPDs

The Data Usability Summary Reports (DUSR) will be prepared and then reviewed by the Program Quality Assurance Monitor before issuance. The DUSRs will provide a detailed assessment of each sample delivery group (SDG) and present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and Chain of Custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method. Additional details on the DUSRs are provided in the QAPP in Appendix C.

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## 3.7 Management of Investigation-Derived Waste

Grossly contaminated or excess soil cuttings and purge water will be containerized and staged on site, pending proper disposal at an off-site waste management facility. Soil cuttings with no apparent staining, odors, or PID readings above background conditions will be used to backfill boreholes. Soil to be disposed of off-site will be placed in 55-gallon, UN/DOT-approved drums. Decontamination fluids, if necessary, will be placed in UN/DOT-approved fluid drums with closed tops. Drums will be properly labeled, sealed, and characterized, as necessary. Drums will be labeled as nonhazardous waste pending analysis and stored in a manner to prevent contents from discharging to the environment. Investigative derived waste will be disposed of off-site at one or more selected disposal facilities within 90 days of generation. If RI analytical data is insufficient to gain disposal facility acceptance, additional waste characterization samples will be collected. Additional sampling and analyses may be required based on the selected disposal facility. Waste characterization samples will be submitted to by a NYSDOH ELAP-approved laboratory for analysis in accordance with the QAPP provided in Appendix C. Management of investigation-derived waste (IDW) will comply with NYSDEC DER-10 3.3(e) and DER-31 (Section 3.11).

## 3.8 Air Monitoring

Air monitoring will be conducted for site personnel (HASP) and the community (CAMP) (Appendix D). Fugitive particulate (dust) generation that could affect site personnel or the public is not expected because intrusive work is limited to boring, monitoring well, and vapor point installation, which does not disturb large volumes of soil.

Dust emissions will be monitored using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10). Organic vapors will be monitored with a PID. Odors will be periodically monitored by site personnel at and beyond the site perimeter. Dust and odor suppression measures (e.g., water misting, odor suppressant) will be implemented as needed. All PIDs used will be equipped with a 10.6 eV bulb.

### 3.8.1 Personnel Air Monitoring

Langan will conduct air monitoring of the breathing zone periodically during drilling and sampling activities to evaluate health and safety protection for the Langan field personnel. Initially, ambient air monitoring will be performed within the work area. Langan will monitor VOCs with a PID (MultiRAE 3000 or similar) in accordance with the HASP (Appendix B). If air monitoring during intrusive operations identifies the presence of VOCs, on-site personnel will follow the guidelines outlined in the HASP regarding action levels, permissible exposure, engineering controls, and personal protective equipment. If the VOC action level is exceeded, work will cease and the work location will be evacuated. Monitoring will continue until the levels drop to safe limits. At that time, work can resume with continued monitoring. If high levels persist, field activities will be halted and the work relocated to another area. If dust emissions are observed, work will stop and dust suppression measures will be used.

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3.8.2 Community Air Monitoring Plan

In addition to air monitoring in the worker breathing zone, Langan will conduct community air monitoring in compliance with the NYSDOH Generic CAMP. CAMP deployment will comply with NYSDEC DER-10 Appendix 1A and Appendix 1B. The CAMP is included as Appendix D of this RIWP.

Langan will conduct periodic monitoring for VOCs during non-intrusive work such as the collection of groundwater samples. Periodic monitoring may include obtaining measurements upon arrival at a location, when opening a monitoring well cap, when bailing/purging a well, and upon departure from a location.

Langan will also conduct continuous monitoring of VOCs and dust during ground-intrusive work (i.e., soil boring advancement and monitoring well installation). During ground-intrusive work, Langan will measure upwind concentrations at the start of each workday to establish background concentrations. Langan will monitor VOCs and dust at the downwind perimeter of the work zone, which will be established at a point on the site where the general public or site employees may be present. Monitoring for VOCs will be conducted with a PID. Dust emissions will be monitored using real-time monitoring equipment capable of measuring PM-10 (e.g., DustTrak). If dust emissions are observed, work will stop and dust suppression measures will be used. Odors will be periodically monitored by site personnel at and beyond the site perimeter.

If work activities occur within 20 feet of occupied structures and total VOC concentrations exceed 1 ppm or particulate concentrations exceed 150 µg/m$^3$ at building walls or air intakes, monitoring within the occupied structures and implementation of appropriate engineering controls will be performed as required.

## 3.9 Fish and Wildlife Resources Impact Analysis

A Fish and Wildlife Resources Impact Analysis (FWRIA) screening-level review will be conducted in accordance with Section 3.10 and Appendix 3C of the NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation. If necessary, based on the results of the screening-level review, a full FWRIA will be performed. The assessment will be included in the RIR.

## 3.10 Green and Sustainable Remediation

The NYSDEC DER-31 Green and Sustainable Remediation Initiative requires that green remediation concepts and techniques be considered during all stages of the remedial program, including investigation, with the goal of improving the sustainability of the cleanup and summarizing the net environmental benefit of any implemented green technology. The following measures will be implemented during the RI:

1. Limit use of generators, drilling equipment, and vehicles to reduce emissions to the atmosphere;
2. Minimize IDW generated by reusing soil/fill that does not exhibit visual, olfactory, or PID evidence of contamination to backfill boreholes after sampling;

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3. Minimize truck travel for disposal of IDW by selecting local disposal facilities for IDW;
4. Request that the environmental drillers use clean diesel equipment to reduce emissions to the atmosphere; and
5. Utilize public transportation to access the site during implementation of the RI, to the extent practicable.

### 3.11 Qualitative Human Health Exposure Assessment

A Qualitative Human Health Exposure Assessment (QHHEA) will be conducted in accordance with Appendix 3B of the NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation. The assessment will be submitted in the RIR.

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## 4.0 REMEDIAL INVESTIGATION REPORT

Following completion of the RI and receipt of analytical data, an RIR will be prepared in accordance with the applicable requirements of DER-10 Section 3.14. The report will include:

(1) A summary of the site history and previous investigations;

(2) A description of site conditions and the remedial investigation;

(3) Sampling methodology and field observations;

(4) Evaluation of the results and findings;

(5) Conclusions; and

(6) Recommendations for any further assessment, if warranted.

The report will summarize the nature and extent of contamination for each AOC and identify complete and potentially complete exposure pathways (as determined through the QHHEA). DUSRs will be included in the RIR, and electronic data deliverables will be submitted to the NYSDEC EQuIS database prior to submission of the draft RIR.

The report will include soil boring and well construction logs, sampling logs, tabulated analytical results, figures, and laboratory data packages. The analytical results will be organized in table format and include sample location; media sampled; sample depth; field/laboratory identification numbers; analytical results; and applicable Standards, Criteria, and Guidance (SCG) pertaining to the site and contaminants of concern for comparison. The report will include scaled figures showing the locations of soil borings, monitoring wells, and vapor points; sample concentrations above SCGs for each media; groundwater elevation contours and flow direction; and, if appropriate, groundwater contaminant concentration contours.

Soil analytical results will be compared to the UU, PGW, and RURR SCOs and the guidance values set forth in the NYSDEC Part 375 Remedial Programs guidance for Sampling, Analysis, and Assessment of PFAS (April 2023). Groundwater analytical results will be compared to the NYSDEC SGVs for Class GA water. Soil vapor results will be tabulated. Co-located sub-slab and indoor air samples will be compared against Decision Matrices in the 2006 NYSDOH Guidance (updated in 2024). The RIR will be provided in an electronic format to the NYSDEC.

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## 5.0 SCHEDULE

The table below presents an anticipated schedule for the proposed RI and reporting following the approval of the RIWP. If the schedules changes, it will be updated and submitted to the NYSDEC.

| Milestone | Weeks from NYSDEC Approval of RIWP | Estimated Duration (weeks) |
|---|---|---|
| RI Mobilization | 4 to 8 | 1 Day |
| RI Field Investigation | 4 to 8 | 3 |
| Laboratory Analysis | 6 to 10 | 2 |
| Remedial Investigation Report Preparation and Submission to the NYSDEC | 12 to 16 | 6 |

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**TABLE**

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**Table 1**
**Proposed Sample Summary**
**Remedial Investigation Work Plan**

**13 Culver Street and 372 Riverdale Avenue**
**Yonkers, New York**
**Langan Project No. 190141301**

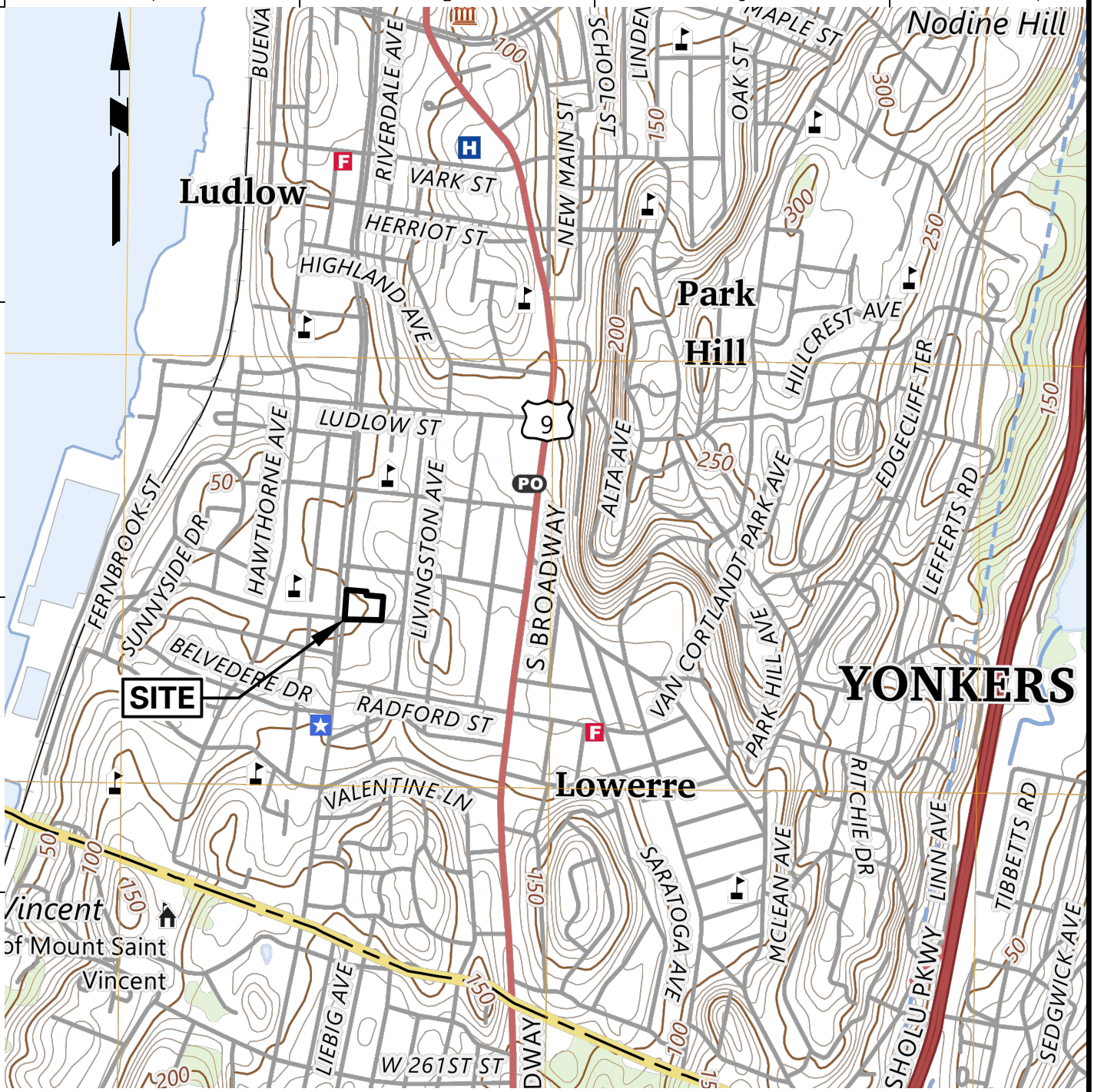
| No. | Sample Name | Type | Boring | Rationale | Depth[1] | Analyses |
|---|---|---|---|---|---|---|
| **Soil** | | | | | | |
| 1 | RISB01_depth | Grab | RISB-01 | AOC-1, AOC-2, AOC-3, AOC-4 | Shallow soil within top two feet of recovery | Part 375/TCL VOCs, SVOCs, Herbicides, Pesticides, PCBs, TAL Metals, Hexavalent Chromium, Cyanide, PFAS, 1,4-dioxane |
| 2 | RISB01_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 3 | RISB01_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 4 | RISB02_depth | | RISB-02 | | Shallow soil within top two feet of recovery | |
| 5 | RISB02_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 6 | RISB02_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 7 | RISB03_depth | | RISB-03 | | Shallow soil within top two feet of recovery | |
| 8 | RISB03_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 9 | RISB03_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 10 | RISB04_depth | | RISB-04 | | Shallow soil within top two feet of recovery | |
| 11 | RISB04_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 12 | RISB04_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 13 | RISB05_depth | | RISB-05 | AOC-3, AOC-4 | Shallow soil within top two feet of recovery | |
| 14 | RISB05_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 15 | RISB05_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 16 | RISB06_depth | | RISB-06 | | Shallow soil within top two feet of recovery | |
| 17 | RISB06_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 18 | RISB06_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 19 | RISB07_depth | | RISB-07 | AOC-1, AOC-2, AOC-3, AOC-4 | Shallow soil within top two feet of recovery | |
| 20 | RISB07_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 21 | RISB07_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 22 | RISB08_depth | | RISB-08 | | Shallow soil within top two feet of recovery | |
| 23 | RISB08_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 24 | RISB08_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 22 | RISB09_depth | | RISB-09 | | Shallow soil within top two feet of recovery | |
| 23 | RISB09_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 24 | RISB09_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 25 | RISB10_depth | | RISB-10 | | Shallow soil within top two feet of recovery | |
| 26 | RISB10_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 27 | RISB10_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 28 | RISB11_depth | | RISB-11 | | Shallow soil within top two feet of recovery | |
| 29 | RISB11_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 30 | RISB11_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 31 | RISB12_depth | | RISB-12 | | Shallow soil within top two feet of recovery | |
| 32 | RISB12_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 33 | RISB12_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 34 | RISB13_depth | | RISB-13 | | Shallow soil within top two feet of recovery | |
| 35 | RISB13_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 36 | RISB13_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| 37 | RISB14_depth | | RISB-14 | | Shallow soil within top two feet of recovery | |
| 38 | RISB14_depth | | | | Greatest degree of impacts (if observed) or groundwater interface | |
| 39 | RISB14_depth | | | | One-foot below vertical extent of impacts, if encountered | |
| NA | SODUP01_date | Duplicate | TBD | QA/QC | Duplicate | |
| | SODUP02_date | | | | Duplicate | |
| | SBXX_date_MS | MS | | | Matrix Spike | |
| | SBXX_date_MSD | MSD | | | Matrix Spike Duplicate | |
| | SOFB01_date | Field Blank | NA | | Field Blank | |
| | SOFB02_date | | | | Field Blank | |
| **Groundwater** | | | | | | |
| 1 | MW01_date | Grab | MW-01 | AOC-1, AOC-2, AOC-3, AOC-4 | Midpoint of screened interval | TCL VOCs, SVOCs, PCBs, Herbicides, Pesticides, TAL Metals (Total and Dissolved), Trivalent and Hexavalent Chromium, Total Cyanide, PFAS, and 1,4-dioxane |
| 2 | MW02_date | | MW-02 | | | |
| 3 | MW06_date | | MW-06 | AOC-3, AOC-4 | | |
| 4 | MW07_date | | MW-07 | AOC-1, AOC-2, AOC-3, AOC-4 | | |
| 5 | MW08_date | | MW-08 | | | |
| 6 | MW09_date | | MW-09 | | | |
| 7 | MW10_date | | MW-10 | | | |
| 8 | MW11_date | | MW-11 | | | |
| 9 | MW12_date | | MW-12 | | | |
| 10 | MW13_date | | MW-13 | | | |
| 11 | MW14_date | | MW-14 | | | |
| NA | GWDUP01_date | Duplicate | TBD | QA/QC | Duplicate | |
| | MWXX_date_MS | MS | | | Matrix Spike | |
| | MWXX_date_MSD | MSD | | | Matrix Spike Duplicate | |
| | GWFB01_date | Field Blank | NA | | Field Blank | |
| | GWTB01_date | Trip Blank | | | Trip Blank | TCL VOCs |
| | GWTB02_date | | | | | |
| | GWTB03_date | | | | | |
| | GWTB04_date | | | | | |
| **Soil Vapor** | | | | | | |
| 1 | SV01_date | Grab | SV-01 | AOC-1, AOC-2, AOC-3, AOC-4 | 5 feet bgs or 2 feet above the groundwater table, whichever is shallower | VOCs by USEPA Method TO-15 |
| 2 | SV02_date | | SV-02 | | | |
| 3 | SV04_date | | SV-04 | | | |
| 4 | SV06_date | | SV-06 | AOC-3, AOC-4 | | |
| 5 | SV07_date | | SV-07 | AOC-1, AOC-2, AOC-3, AOC-4 | | VOCs by USEPA Method TO-15 |
| 6 | SV12_date | | SV-12 | | | |
| 7 | SV14_date | | SV-14 | | | |
| **Sub-Slab Vapor** | | | | | | |
| 1 | SSV08_date | Grab | SSV-08 | AOC-1, AOC-2, AOC-3, AOC-4 | Immediately below the building slab | VOCs by USEPA Method TO-15 |
| 2 | SSV10_date | | SSV-10 | | | |
| **Indoor and Ambient Air** | | | | | | |
| 1 | IA08_date | Grab | IA08 | AOC-1, AOC-2, AOC-3, AOC-4 | Co-located with sub-slab vapor points | VOCs by USEPA Method TO-15 |
| 2 | IA10_date | | IA10 | | | |
| 6 | AA01_date | | AA01 | QA/QC | 3 to 5 feet above grade surface | |

**Areas of Concern (AOCs):**
Investigate AOC 1 - Investigate areas of historical site operations
Investigate AOC 2 - Investigate areas of waste storage
Investigate AOC 3 - Investigate areas of petroleum-related impacts observed during previous investigations
Investigate AOC-4 - Investigate current and historical use of adjoining and nearby upgradient properties and related open spills

**Notes:**
1. Soil sample depth intervals will be determined in the field.
2. Soil samples to be analyzed for New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes,
3. TBD = to be determined (in the field)
4. VOC = volatile organic compound
5. SVOC = semivolatile organic compound
6. PCB = polychlorinated biphenyl
7. TCL = Target Compound List
8. TAL = Target Analyte List
9. QA/QC = quality assurance/quality control
10. NA = not applicable
11. PFAS = per-fluorinated chemicals as limited to the list of compounds designated by NYSDEC
12. PBS = Petroleum Bulk Storage
13. bgs = below grade surface

# FIGURES

DRAFT




**LEGEND:**

APPROXIMATE SITE BOUNDARY

**NOTES:**

1. BASEMAP REFERENCED FROM THE UNITED STATES GEOLOGICAL SURVEY (USGS) 7.5-MINUTE SERIES QUADRANGLE MAPS FOR YONKERS AND MOUNT VERNON, NEW YORK, DATED 2023.
2. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

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| | |
|---|---|
| Project | 13 CULVER STREET AND 372 RIVERDALE AVENUE<br>BLOCK No. 129, LOT Nos. 26 & 30<br>WESTCHESTER COUNTY NEW YORK |
| Figure Title | SITE LOCATION MAP |
| Project No. | 190141301 |
| Date | 5/27/2026 |
| Drawn By | VK |
| Checked By | EB |
| Figure | 1 |

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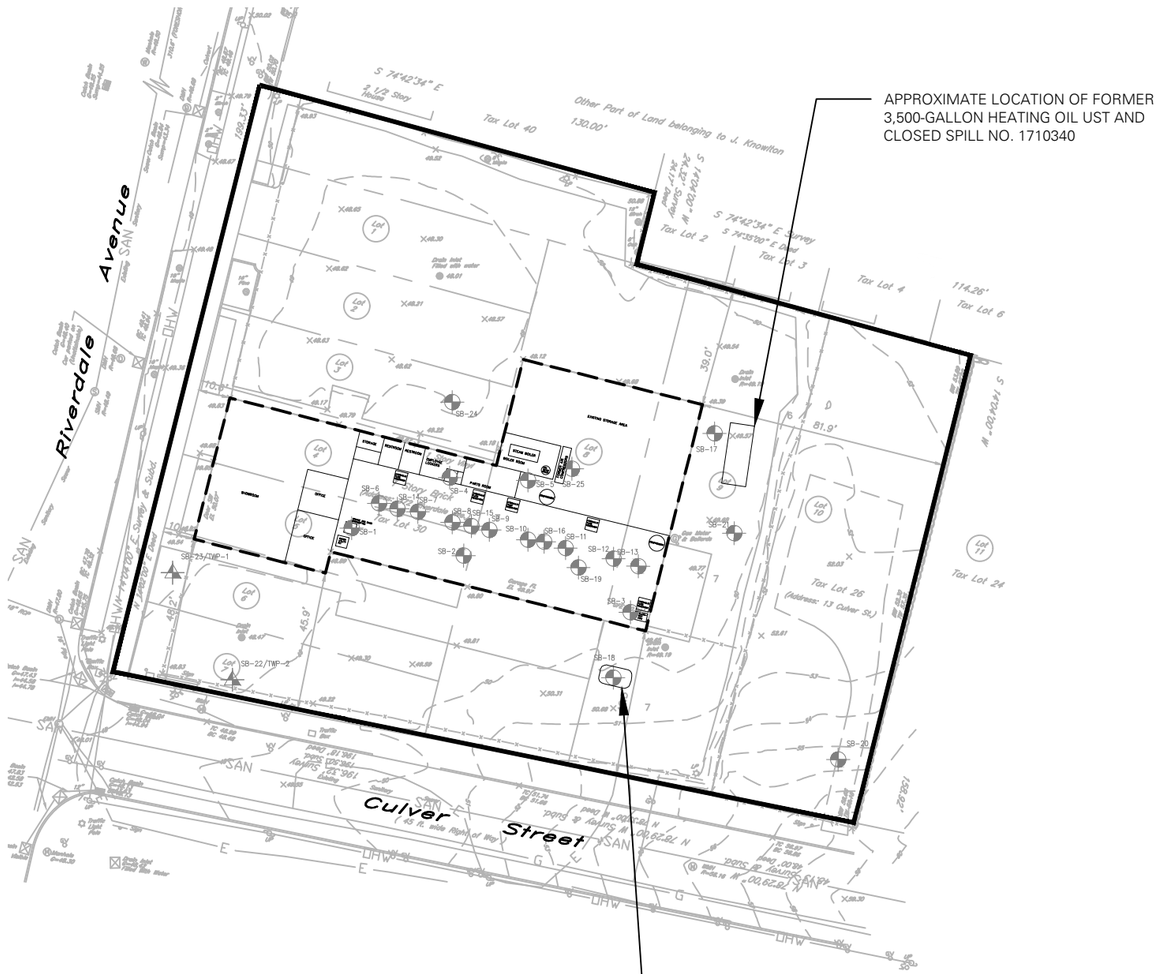
Filename: \\langan.com\data\WPW\data3\190141301\Project Data\CAD\01\SheetFiles\Environmental\RIWP\Figure 1 - Site Location Plan.dwg Date: 5/27/2026 Time: 10:09 User: vkanagaratnam Style Table: Langan.stb Layout: ANSIA-BP (2)




LEGEND:

- APPROXIMATE SITE BOUNDARY
- APPROXIMATE BUILDING BOUNDARY
- PREVIOUS SOIL BORING LOCATION
- PREVIOUS SOIL BORING/MONITORING WELL LOCATION

NOTES:

1. BASEMAP REFERENCED FROM SURVEY OF PROPERTY PREPARED FOR TRINITY MANAGEMENT IN THE CITY OF YONKERS, LOTS 1 THROUGH 9, PREPARED BY WARD CARPENTER ENGINEERS INC., DATED JANUARY 19, 2026.
2. BUILDING INTERIOR FLOOR PLAN AND SAMPLE LOCATIONS REFERENCED FROM PHASE II LIMITED SUBSURFACE INVESTIGATION, PREPARED BY RANSOM CONSULTING, INC., DATED AUGUST 15, 2017.
3. SITE BOUNDARY EXTENTS, SAMPLE LOCATIONS, BUILDING FLOOR PLAN AND LOCATIONS SHOWN ARE APPROXIMATE.
4. ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
5. NYSDEC = NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL CONSERVATION
6. BCP = BROWNFIELD CLEANUP PROGRAM
7. UST = UNDERGROUND STORAGE TANK

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Project
13 CULVER STREET AND 372 RIVERDALE AVENUE
BLOCK No. 129, LOT Nos. 26 & 30
WESTCHESTER COUNTY NEW YORK

Drawing Title
SITE PLAN AND PREVIOUS SAMPLE LOCATION MAP

| Project No. | Drawing No. |
|---|---|
| 190141301 | 2 |
| Date: 05/27/2026 | |
| Drawn By: VK | |
| Checked By: EB | |

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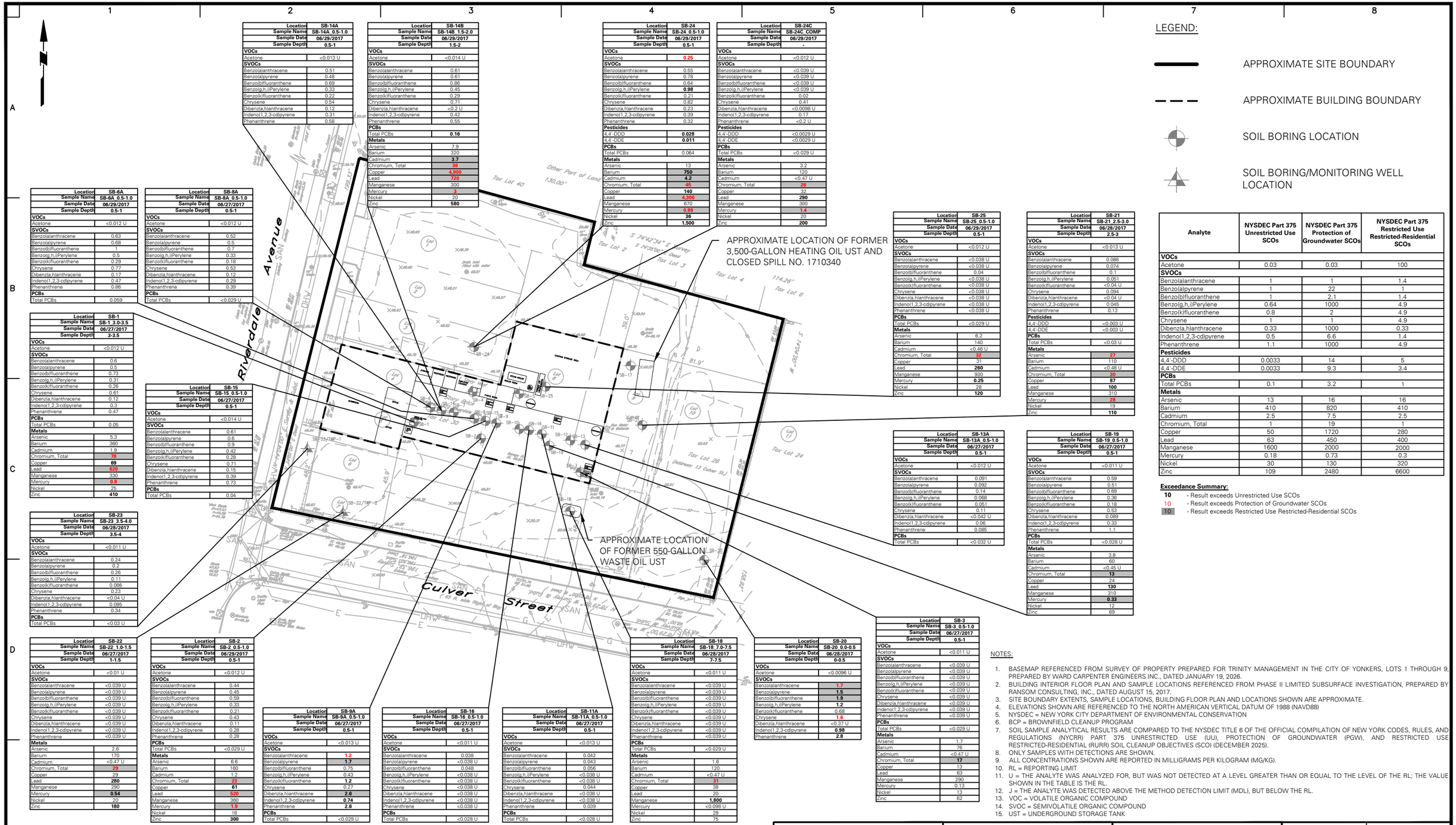
Filename: \\langan.com\data\WPW\data3\190141301\Project Data\CAD\01\SheetFiles\Environmental\RIWP\RIWP figures.dwg Date: 6/2/2026 Time: 15:18 User: vkanagaratnam Style Table: Langan.stb Layout: Site Plan Sample Locations


Riverdale Avenue
Culver Street
APPROXIMATE LOCATION OF FORMER 3,500-GALLON HEATING OIL UST AND CLOSED SPILL NO. 1710340
APPROXIMATE LOCATION OF FORMER 550-GALLON WASTE OIL UST
Tax Lot 40
Tax Lot 2
Tax Lot 3
Tax Lot 4
Tax Lot 6
Tax Lot 30
Tax Lot 26
(Address: 13 Culver St.)
Tax Lot 24
Other Part of Lot 1,300.00'
S 74°42'34" E Survey
S 74°35'52" E Deed
114.26'
81.9'
39.0'
SB-1
SB-2
SB-3
SB-4
SB-5
SB-6
SB-7
SB-8
SB-9
SB-10
SB-11
SB-12
SB-13
SB-14
SB-15
SB-16
SB-17
SB-18
SB-19
SB-20
SB-21
SB-22/TMP-1
SB-23/TMP-2
SB-24
SB-25
SB-26
SB-27
SB-28
SB-29
SB-30
SB-31
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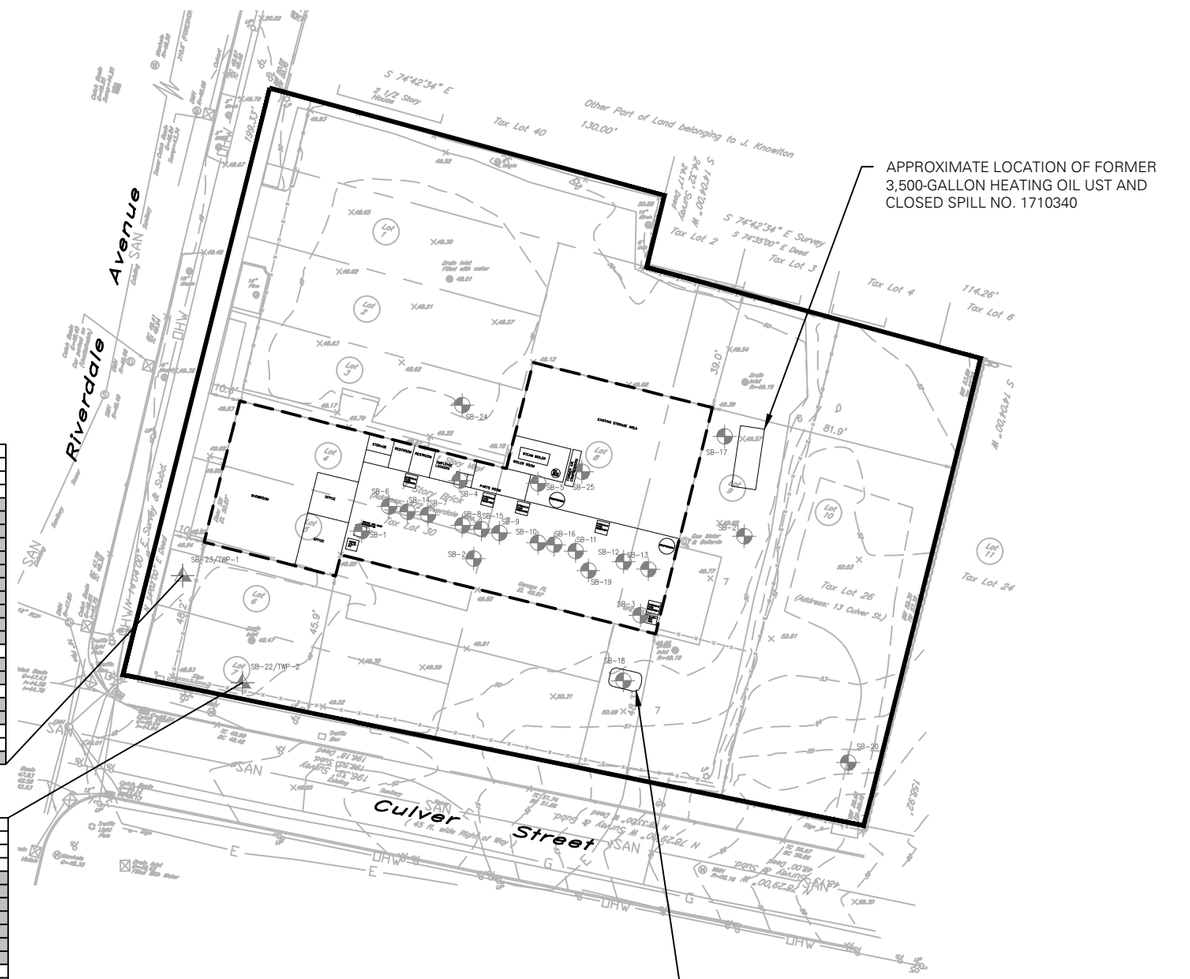
SB-63




LEGEND:

- APPROXIMATE SITE BOUNDARY
- APPROXIMATE BUILDING BOUNDARY
- SOIL BORING LOCATION
- SOIL BORING/MONITORING WELL LOCATION

| Location | TWP-1 |
|---|---|
| Sample Name | TWP-1_062917 |
| Sample Date | 06/27/2017 |
| **VOCs** | |
| 1,2,4-Trimethylbenzene | 2,500 |
| 1,3,5-Trimethylbenzene (Mesitylene) | 890 |
| Acetone | 140 |
| Benzene | 94 |
| Ethylbenzene | 1,700 |
| Isopropylbenzene (Cumene) | 250 |
| M,P-Xylene | 4,600 |
| n-Butylbenzene | 30 |
| n-Propylbenzene | 560 |
| o-Xylene (1,2-Dimethylbenzene) | 410 |
| Sec-Butylbenzene | 25 |
| Tert-Butyl Methyl Ether (MTBE) | <10 U |
| Toluene | 150 |
| Total Xylenes | 5,000 |
| **SVOCs** | |
| 2,4-Dimethylphenol | 10 |
| Naphthalene | 160 |
| Phenol | <6 U |
| **Metals** | |
| Lead | 27 |

| Location | TWP-2 |
|---|---|
| Sample Name | TWP-2_062817 |
| Sample Date | 06/27/2017 |
| **VOCs** | |
| 1,2,4-Trimethylbenzene | 740 |
| 1,3,5-Trimethylbenzene (Mesitylene) | 87 |
| Acetone | 63 |
| Benzene | 560 |
| Ethylbenzene | 660 |
| Isopropylbenzene (Cumene) | 100 |
| M,P-Xylene | 960 |
| n-Butylbenzene | <10 U |
| n-Propylbenzene | 200 |
| o-Xylene (1,2-Dimethylbenzene) | 130 |
| Sec-Butylbenzene | 11 |
| Tert-Butyl Methyl Ether (MTBE) | 140 |
| Toluene | 67 |
| Total Xylenes | 1,100 |
| **SVOCs** | |
| 2,4-Dimethylphenol | 3.7 |
| Naphthalene | 87 |
| Phenol | 4.6 |
| **Metals** | |
| Lead | 33 |

| Analyte | NYSDEC SGVs |
|---|---|
| **VOCs** | |
| 1,2,4-Trimethylbenzene | 5 |
| 1,3,5-Trimethylbenzene (Mesitylene) | 5 |
| Acetone | 50 |
| Benzene | 1 |
| Ethylbenzene | 5 |
| Isopropylbenzene (Cumene) | 5 |
| M,P-Xylene | 5 |
| n-Butylbenzene | 5 |
| n-Propylbenzene | 5 |
| o-Xylene (1,2-Dimethylbenzene) | 5 |
| Sec-Butylbenzene | 5 |
| Tert-Butyl Methyl Ether (MTBE) | 10 |
| Toluene | 5 |
| Total Xylenes | 5 |
| **SVOCs** | |
| 2,4-Dimethylphenol | 1 |
| Naphthalene | 10 |
| Phenol | 1 |
| **Metals** | |
| Lead | 25 |

**Exceedance Summary:**

**10** - Result exceeds NYSDEC SGVs

NOTES:

1. BASEMAP REFERENCED FROM SURVEY OF PROPERTY PREPARED FOR TRINITY MANAGEMENT IN THE CITY OF YONKERS, LOTS 1 THROUGH 9, PREPARED BY WARD CARPENTER ENGINEERS INC., DATED JANUARY 19, 2026.
2. BUILDING INTERIOR FLOOR PLAN AND SAMPLE LOCATIONS REFERENCED FROM PHASE II LIMITED SUBSURFACE INVESTIGATION, PREPARED BY RANSOM CONSULTING, INC., DATED AUGUST 15, 2017.
3. SITE BOUNDARY EXTENTS, SAMPLE LOCATIONS, BUILDING FLOOR PLAN AND LOCATIONS SHOWN ARE APPROXIMATE.
4. ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
5. NYSDEC = NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL CONSERVATION
6. BCP = BROWNFIELD CLEANUP PROGRAM
7. GROUNDWATER SAMPLE ANALYTICAL RESULTS ARE COMPARED TO THE NYSDEC TITLE 6 OF THE OFFICIAL COMPILATION OF NEW YORK CODES, RULES, AND REGULATIONS (NYCRR) PART 703.5 AND THE NYSDEC TECHNICAL AND OPERATIONAL GUIDANCE SERIES (TOGS) 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES FOR CLASS GA WATER AND PUBLISHED ADDENDA (HEREIN COLLECTIVELY REFERENCED AS "NYSDEC SGVs).
8. ALL CONCENTRATIONS SHOWN ARE REPORTED IN MICROGRAMS PER LITER (ug/l).
9. RL = REPORTING LIMIT
10. U = THE ANALYTE WAS ANALYZED FOR, BUT WAS NOT DETECTED AT A LEVEL GREATER THAN OR EQUAL TO THE LEVEL OF THE RL; THE VALUE SHOWN IN THE TABLE IS THE RL.
11. VOC = VOLATILE ORGANIC COMPOUND
12. SVOC = SEMIVOLATILE ORGANIC COMPOUND
13. UST = UNDERGROUND STORAGE TANK

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Project
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BLOCK No. 129, LOT Nos. 26 & 30
WESTCHESTER COUNTY NEW YORK

Drawing Title
PREVIOUS GROUNDWATER SAMPLE ANALYTICAL RESULTS MAP

Project No. 190141301
Date 05/27/2026
Drawn By VK
Checked By EB

Drawing No. 4

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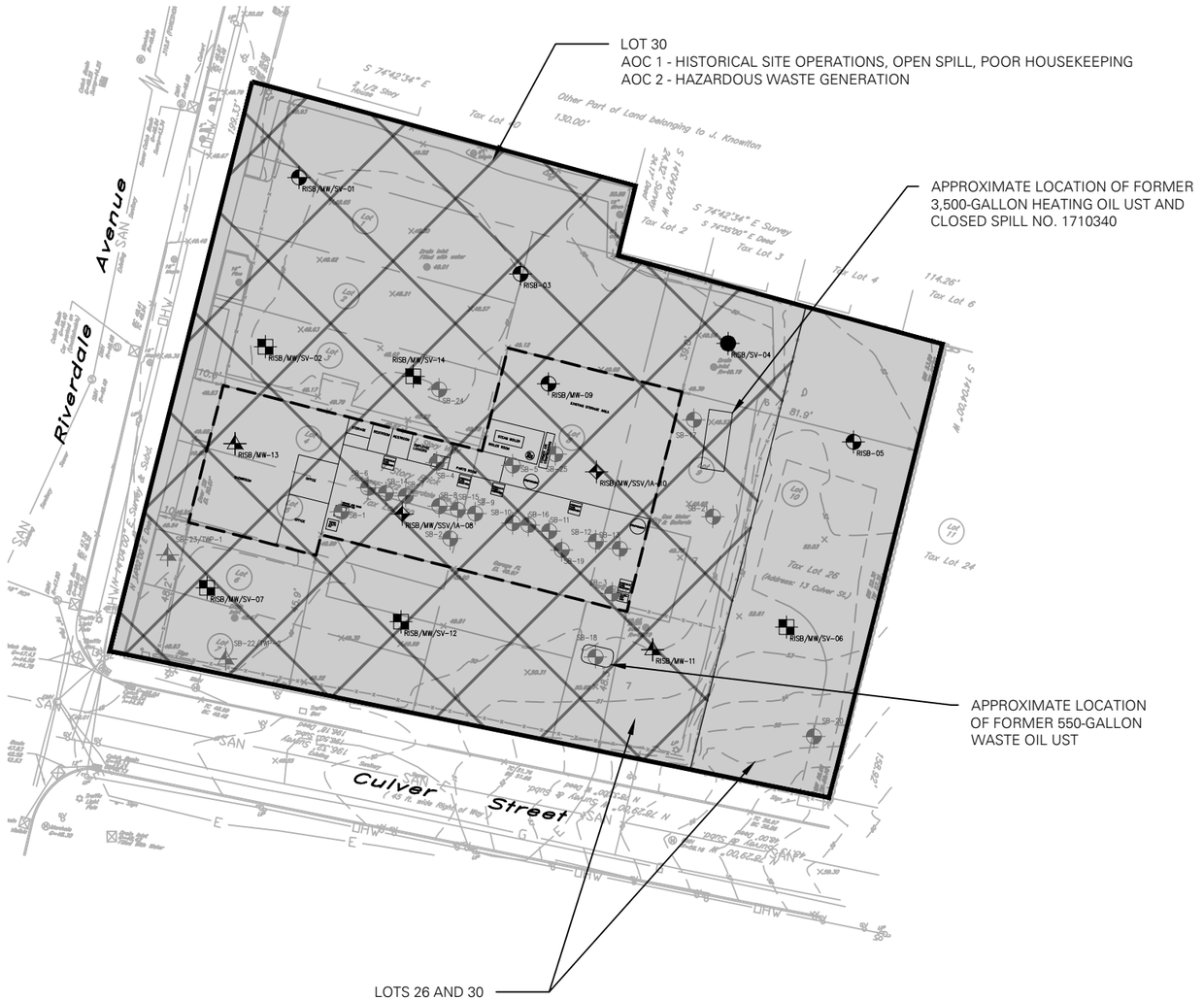


LEGEND:

- APPROXIMATE SITE BOUNDARY
- APPROXIMATE BUILDING BOUNDARY
- AOC 1 AND AOC 2
- AOC 3 AND AOC 4
- PREVIOUS SOIL BORING LOCATION
- PREVIOUS SOIL BORING/MONITORING WELL LOCATION
- PROPOSED SOIL BORING LOCATION
- PROPOSED SOIL BORING/MONITORING WELL LOCATION
- PROPOSED SOIL BORING/SOIL VAPOR LOCATION
- PROPOSED SOIL BORING/MONITORING WELL/SOIL VAPOR LOCATION
- PROPOSED SOIL BORING/MONITORING WELL/SUB-SLAB VAPOR/INDOOR AIR LOCATION

NOTES:

1. BASEMAP REFERENCED FROM SURVEY OF PROPERTY PREPARED FOR TRINITY MANAGEMENT IN THE CITY OF YONKERS, LOTS 1 THROUGH 9, PREPARED BY WARD CARPENTER ENGINEERS INC., DATED JANUARY 19, 2026.
2. BUILDING INTERIOR FLOOR PLAN AND PREVIOUS SAMPLE LOCATIONS REFERENCED FROM PHASE II LIMITED SUBSURFACE INVESTIGATION, PREPARED BY RANSOM CONSULTING, INC., DATED AUGUST 15, 2017.
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4. ELEVATIONS SHOWN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
5. NYSDEC = NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL CONSERVATION
6. BCP = BROWNFIELD CLEANUP PROGRAM
7. AOC = AREA OF CONCERN
8. UST = UNDERGROUND STORAGE TANK

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BLOCK No. 129, LOT Nos. 26 & 30
WESTCHESTER COUNTY NEW YORK

Drawing Title
AREAS OF CONCERN AND PROPOSED SAMPLE LOCATION MAP

| Project No. | Drawing No. |
|---|---|
| 190141301 | 5 |
| Date: 05/27/2026 | |
| Drawn By: VK | |
| Checked By: EB | |

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# APPENDIX A

# PREVIOUS ENVIRONMENTAL REPORTS

DRAFT

**PHASE I ENVIRONMENTAL SITE ASSESSMENT**
**PROPOSED CVS PHARMACY/STORE NO. 10386**
**13 CULVER STREET AND 372 RIVERDALE AVENUE**
**SECTION 1, BLOCK 129, LOTS 26 AND 30**
**CITY OF YONKERS, WESTCHESTER COUNTY, NEW YORK**

Prepared for:

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island 02895-6146

and

T.M. Crowley & Associates, Inc.
14 Breakneck Hill Road, Suite 101
Lincoln, Rhode Island 02865

Prepared by:

**Ransom Consulting, Inc.**
2127 Hamilton Avenue
Hamilton, New Jersey 08619
(609) 584-0090
Ransom Project No. 111.02013

June 7, 2017

## EXECUTIVE SUMMARY

The following report presents the findings of a Phase I Environmental Site Assessment (ESA) performed by Ransom Consulting, Inc. (Ransom) for the properties located at 13 Culver Street and 372 Riverdale Avenue in the City of Yonkers, New York (the "Site"), which includes Section 1, Block 129, Lots 26 and 30, respectively. This Phase I ESA was conducted in accordance with the scope and limitations of ASTM International E 1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and Ransom's Corporate Services Agreement with CVS Pharmacy, Inc. (CVS) dated April 1, 2015 (the "Corporate Services Agreement"). The purpose of this Phase I ESA was to evaluate the environmental condition of the Site for evidence of a release or threat of release of hazardous substances or petroleum products (HSP) and to provide our professional opinion regarding evidence of recognized environmental conditions (RECs) in connection with the Site.

The Site consists of one 8,695 square-foot commercial structure (the "Lot 30 Site Building"), constructed sometime in 1974 on the 372 Riverdale Avenue (Lot 30) portion of the Site, a 1,320 square-foot residential structure with a basement (the "Residential Building") on the 13 Culver Street (Lot 26) portion of the Site (collectively, the Site Buildings), asphalt paved parking surfaces, and areas of limited landscaping. The Site is located in a mixed commercial and residential area of the City of Yonkers.

The Lot 30 Site Building recently operated as a Goodyear-branded automotive repair shop and tire sales center from 1974 until sometime in 2015. The Lot 30 Site Building is currently occupied by the West Coast Auto Sales company, who have utilized the Site for the sale of used cars since sometime in 2016. The Residential Building on-Site was constructed sometime prior to 1897 and has been vacant since sometime in 2009.

Prior to development of the Lot 30 Site Building in 1974, the entire Site consisted of ten residential structures, one of which was removed by 1951, and six of which were removed circa 1973. Commercial improvements (i.e., an additionally parking area) to the Lot 30 portion of the Site were completed in June of 1980, at which time two more residential structures located to the north of the Lot 30 Site Building were removed from the Site and a paved parking area was installed. The Residential Building located on the Lot 26 portion of the Site is the only remaining residential structure on-Site.

The Site is bordered by residential properties to the north and Culver Park to the east. The PEARLS Hawthorne School is located to the west of the Site, across Riverdale Avenue. To the south of the Site, across Culver Street, is a Citgo-branded gasoline filling station and residential properties. Further south of the Citgo-branded gasoline filling station is the Devonshire Discount Tire, Auto Body & Repair Center.

A total of 15 current, sealed, or former floor drains, one former/inactive 4-inch cast iron drainage pipe, one 6-inch cast iron drainage pipe, and one grease/sand interceptor were either observed within the Lot 30 Site Building or depicted on historical building plans.

The Lot 30 Site Building was observed with eight service bays, which historically had (or currently have) seven underground hydraulic lifts and one hydraulic alignment rack. The former hydraulic lift system utilized approximately five underground hydraulic oil reservoirs, two air compressors with an associated air filter, and three floor-mounted control boxes. The current underground hydraulic lift system, including seven underground hydraulic lifts and one hydraulic alignment rack, was observed with five wall-mounted hydraulic fluid reservoirs/control boxes, three floor-mounted control boxes (where the control box between Bays 3 and 4 was presumably disconnected) and two electric air compressors. It was

presumed that the system was upgraded sometime around 2006; however, the status of the formerly used underground reservoirs is unknown.

Used vehicle storage was observed within the northeastern most storage area of the Lot 30 Site Building, as well as throughout the paved parking areas surrounding the Lot 30 Site Building. At the Residential Building, two metal doors were observed to be welded shut during site reconnaissance activities of the Residential Building, further barring access into a room where a suspect boiler was located.

One inactive fuel-oil fired boiler was observed within the Lot 30 Site Building as well. Ransom observed waste ash within the base of the boiler and potential asbestos containing materials (ACMs) along piping associated with the boiler.

The Lot 30 Site Building historically operated with two underground storage tanks (USTs), including: one 3,000-gallon fuel oil (No. 2) underground storage tank (UST) with an associated pump and appurtenant piping that connected to the fuel-oil fired boiler, which was located on the eastern side of the Lot 30 Site Building; and one 550-gallon waste oil UST located on the southeastern corner of the Lot 30 Site Building. Both USTs were installed sometime in or around 1974 and were related to the automotive repair shop and tire sales center activities. Permitting documentation reviewed at the City of Yonkers Housing and Building Department indicated that removal activities for two USTs were completed by September 1995; however, documents reviewed did not reference UST content or capacities. Based on known information, the USTs referenced within the permitting documentation are presumed to be the former 3,000-gallon fuel oil UST and former 550-gallon waste oil UST; however, detailed UST removal documentation was not identified by Ransom.

The 1898 Sanborn Map indicted one of the former residential properties on the Site with "Low Ground," indicating potential historic filling on-Site.

Ransom observed three 55-gallon steel drums containing waste oil within the service garage area of the Lot 30 Site Building, presumably generated during former automobile repair operations. The drums were observed to be in good condition with no visible staining on or around the drums; however, visible oil was observed on the drum lids. Additionally, evidence of six circular stains, indicative of former drum storage (presumably for waste oil), were observed between Bay 6 and Bay 7 within the Lot 30 Site Building. The concrete in the vicinity of the drums was observed with a large crack; however, no evidence of floor drains was observed in the vicinity of the staining.

Ransom observed Site-wide solid waste including, but not limited to, gasoline cans, paints cans, propane tanks, cleaning solvents, tires, 5-gallon buckets with cooking oil, etc. Additionally, a chest freezer and other former appliances, which may potentially contain ozone depleting substances (ODS), was observed as being stored on the exterior portion of the Residential property.

As part of our assessment of the Site, Ransom contracted Environmental Data Resources, Inc. (EDR) to perform an environmental database search. The Site was listed in the EDR environmental database report on the Resource Conservation and Recovery Act list of Conditionally Exempt Small Quantity Generators (RCRA-CESQ) database as the Goodyear Auto Service Center and was listed as a small quantity generator and handler of hazardous waste; however, no violations were identified in association with this database listing. Additionally, the Site was listed on the EDR database of Historical Auto Stations, which identifies potential automotive facilities based on operator names, as the Goodyear Auto Service Center for the years 1999, 2000, 2002, 2009, 2010, and 2012.

Additionally, gasoline service stations were identified in the EDR report with NY Spill cases on adjoining properties to the south of the Site. The environmental database provided by EDR revealed two active spill numbers (Spill No. 0608110 and Spill No. 0202712) and a spill number of unknown status (Spill No. 110501) related to the active Citgo-branded gasoline filling station located at 380 Riverdale Avenue, adjoining the Site to the south. This property was additionally identified as NY UST Facility ID No. 3-800744, an active facility with two 6,000-gallon gasoline USTs and one 6,000-gallon diesel UST. Based on the identified active spill numbers and close proximity to the Site, Ransom concludes that this facility has the potential to have impacted the Site.

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 for the Site, which consists of an approximate 1.02-acre parcel of land, identified by the City Assessor's Office as Block 129, Lots 26 and 30, and corresponds to 13 Culver Street and 372 Riverdale Avenue, City of Yonkers, Westchester County, New York. Any exceptions to, or deletions from, this practice are described in Section 1.2 of this report. Based on the information identified during this Phase I ESA, Ransom has identified the following RECs in connection with the Site.

- **REC 1 – Automotive Repair Drainage System**: A total of 11 sealed/inactive/former floor drains, four active floor drains, one former/inactive 4-inch cast iron drainage pipe, and one active 6-inch drainage pipe were either observed or identified throughout the Lot 30 Site Building. The former/inactive 4-inch cast iron drainage pipe was depicted as leading to a grease and sand interceptor. The Lot 30 Site Building's drainage system reportedly discharged and/or currently discharges to the municipal sanitary sewer system. The identified floor and appurtenant drainage pipes, and former grease and sand interceptor, represent RECs as follows (details are presented within Section 4.9.1 of this Report):
    - REC 1A – Service Garage Sealed Floor Drain;
    - REC 1B – Boiler Room Sealed Floor Drain;
    - REC 1C – Parts Room Sealed Floor Drain;
    - REC 1D – Bathroom Floor Drains;
    - REC 1E – Employee Locker Room Sealed Floor Drain;
    - REC 1F – Tire Wash Area Floor Drain;
    - REC 1G – Former Hydraulic Lift Floor Drains; and
    - REC 1H – Former Grease and Sand Interceptor.

  Due to the close proximity of the sealed/inactive/former floor drains and former underground grease and sand interceptor to the former automobile repair activities, there is a potential for soil and/or groundwater impacts within this area. Further investigation is warranted.

- **REC 2 – Automotive Repair Hydraulic Lift Systems**: A total of seven of the eight automobile repair bays housed underground hydraulic lifts, and one bay housed an air/hydraulic alignment rack. It is believed that at least five of the seven hydraulic lifts historically had underground hydraulic oil reservoirs, which were upgraded to wall-mounted hydraulic underground lifts. Two former air compressors and associated air filter were located within the storage area of the Lot 30 Site Building and were connected (via underground piping) to the three floor-mounted control boxes for the former hydraulic lift operations. The identified current and former system components represent RECs as follows (details are presented within Section 4.4 of this Report):

- REC 2A – Hydraulic Lifts and Alignment Rack;
- REC 2B – Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes;
- REC 2C – Former Hydraulic Lifts, Air/Hydraulic Alignment Rack and Underground Hydraulic Oil Reservoirs;
- REC 2D – Hydraulic Lift Control Boxes; and
- REC 2E – Former Air Compressors.

Based on the former operations and unknown condition of the subsurface in the vicinity of the current/former hydraulic lifts/alignment rack, wall-mounted hydraulic fluid reservoirs, underground hydraulic oil reservoirs, hydraulic lift control boxes, and former air compressors, there is a potential for soil impacts within these areas. Further investigation is warranted

- **REC 3 – Vehicle Storage**: Used vehicle storage was observed within the northeastern most storage area of the Lot 30 Site Building, as well as throughout the paved parking areas surrounding the Lot 30 Site Building. The areas beneath the parked vehicle was inaccessible during Site reconnaissance activities; therefore, Ransom was unable to ascertain the integrity of the surface materials in these areas. Further investigation is warranted in all vehicle storage areas throughout the Site.

- **REC 4 – Inactive Oil-Fired Boiler System**: One inactive oil-fired burner was observed in the boiler room of the Lot 30 Site Building. The oil-fired burner was observed to be in poor condition with heavy rusting and staining visible on the exterior of the boiler. Due to the presence of dust and dim lighting, the condition of the floor below the boiler could not be fully assessed. Additionally, waste ash, which may contain heavy metals, was observed within the base of the boiler. Due to the poor condition of the oil-fired burner, close proximity to a former floor drain, inability to access the area beneath the oil-fired burner, and presence of waste ash, there is a potential for residual soil impacts in this area. Further investigation into the soil conditions in this area is warranted.

- **REC 5 – Former 3,000-gallon Fuel Oil UST**: One former 3,000-gallon fuel oil UST was identified on historic construction plans on the eastern exterior side of the Lot 30 Site Building. An associated pump was identified on the eastern most portion of the storage area within the Lot 30 Site Building as well. The fuel oil UST depicted on the historical plan was connected to a pump and subsequently to the oil-fired boiler (REC 4) via underground piping. A certificate of completion was issued by the City of Yonkers Bureau of Housing and Buildings on September 19, 1995 for "removed underground oil tanks," presumably indicating the removal of the 3,000-gallon fuel oil UST. However, due to the vague nature of the certificate of completion and lack of additional documentation for the closure activities, further investigation is warranted regarding this REC.

- **REC 6 – Former 550-gallon Waste Oil UST**: One former 550-gallon waste oil UST was identified on historic construction plans on the southeastern exterior or of the Lot 30 Site Building. A certificate of completion was issued by the City of Yonkers Bureau of Housing and Buildings on September 19, 1995 for "removed underground oil tanks," presumably indicating the removal of the 550-gallon waste oil UST. However, due to the vague nature of the certificate of completion and lack of additional documentation for the closure activities, further investigation is warranted regarding this REC.

- **REC 7 – 55-Gallon Waste Oil Drum Storage**: Approximately six circular stains, indicative of former drum storage (presumably for waste oil), were observed between Bay 6 and Bay 7 within the Lot 30 Site Building. The concrete in the vicinity of the drums was observed with a large crack; however, no evidence of floor drains was observed in the vicinity of the staining. The presence of this staining represents evidence of historical drum storage and waste generation, which presumably was how waste oil was stored after the waste oil UST was removed in 1995 until 2015, when automobile repair operations ceased. Due to the observed crack in the concrete and the evidence of staining in this area, further investigation of the soil conditions in this area is warranted.

  Additionally, Ransom observed three 55-gallon steel drums containing waste oil within the service garage area of the Lot 30 Site Building, presumably generated by former automobile repair operations. The drums were observed to be in good condition with no visible staining on or around the drums; however, visible oil was observed on the drum lids. No further investigation is recommended in connection with the existing 55-gallon waste oil drums; however, proper removal and off-site disposal is required prior to Site redevelopment.

- **REC 8 – Current/Former Residential Use**: Ransom identified one current and eight former residential buildings associated with the Site. The existing Residential Building is known to use fuel oil for heating. The historical heating source(s) for the former residential structures are unknown. Lastly, private septic systems are also associated with residential use. Therefore, there is a potential for one or more heating oil (No. 2) USTs and/or one or more septic systems to be present on-Site as follows:

  - **REC 8A – Known Fuel Oil Use at the Residential Building**: Property records were identified by Ransom for the Residential Building located on the Lot 26 portion of the Site, which indicated the usage of fuel oil at this property. Ransom was unable to confirm the presence of a fuel oil tank or boiler at the Residential Building; however, a sealed fill pipe was observed on the eastern side of the structure, along the foundation of the Lot 30 Site Building, indicating the potential presence of a fuel oil AST in the basement. Further, two metal doors were observed to be welded shut during site reconnaissance activities of the Residential Building, barring access into a room where a suspect boiler was located.

  - **REC 8B –Former Residential Use**: Historic records and construction plans identified the presence of eight residential structures (not including the current Residential Building) at the Site prior to redevelopment activities in 1974 and 1980. Specific documentation regarding these structures was not identified by, or provide to, Ransom.

  Due to the potential for historic fuel oil usage on the Lot 26 portion of the Site and based on the absence of a known heating source, UST, and/or septic system information for the former residential houses, further investigation is warranted regarding this REC.

- **REC 9 – Potential Fill**: The 1898 Sanborn Map indicted one of the former residential properties with "Low Ground," which indicates that the property had a potential to have been historically filled. The location of this "Low Ground" indication is mostly beneath the present-day Lot 30 Site Building. Based on the unknown source and characteristics of this potential fill material, Ransom believes that the potential exists for off-site fill material to have been brought on-Site; therefore, Ransom recommends that a subsurface investigation be conducted to assess whether historical fill is present on-Site and if it has impacted the environmental conditions at the Site.

- **REC 10 – Potential Off-site Sources**: Ransom identified two current off-site uses where known or potential past discharges of hazardous chemicals from facilities, including a gasoline filling station and an automotive repair facility, have or may have occurred upgradient of the Site and one off-site use where potential past discharges of hazardous chemicals from facilities, including a former gasoline filling may have occurred sidegradient of the Site. The following potential off-site sources were identified in close proximity to the Site, and represent RECs.

    - **REC 10A – Off-Site Citgo Service Station**: The southerly adjacent Citgo-gasoline filling station was identified as an active service station with multiple active NY Spills incident numbers associated with this property.

    - **REC 10B – Off-Site Devonshire Discount Tire, Auto Body & Repair Center**: A property located approximately 390 feet to the south of the Site was identified as an active auto body and repair center that has a NY Spills incident with a "Closed" status.

    - **REC 10C – Former Riverdale Auto Service Inc.**: The property located 377 Riverdale Avenue, located adjacent (across Riverdale Avenue) to the west and sidegradient of the Site, was identified as a potential off-Site source due to its use as a former gasoline service station from at least 1940 through at least 1978; however, no further information was identified.

  Due to the close proximity, NY Spill incident(s) and/or former/current use, Ransom recognizes the potential for off-Site impact to the Site from the current filling station, active auto body and repair center, and former off-site service station operations; therefore, further investigation is warranted.

In addition to the RECs identified above, Ransom identified the following condition of potential environmental concern, which is being documented as a *de minimis* condition as follows:

- **Site-Wide Solid Waste**: Ransom observed Site-wide solid waste including, but not limited to, gasoline cans, paints cans, propane tanks, cleaning solvents, tires, 5-gallon buckets with cooking oil, etc. Additionally, a chest freezer and other former appliances, which may potentially contain ozone depleting substances (ODS), was observed as being stored on the exterior portion of the Residential property.

Some additional environmental concerns were identified which are considered non-scope under ASTM, but were recognized as areas of potential business environmental risk. Specifically, based on the construction date of the Lot 30 Site Building (1974) and the Residential Building (pre-1897), hazardous building materials may be present in the Site Buildings, including asbestos-containing materials (ACM), polychlorinated biphenyls (PCBs) in fluorescent light ballasts, lead-based paint (LBP), and mercury-containing fluorescent lights and/or other equipment. Prior to demolition of the current Site Buildings, identified hazardous building materials should be removed and disposed of in accordance with local, state, and federal regulations.

Based on the findings and conclusions presented above, Ransom makes the following recommendations:

- Based upon the construction date of the Site Building (1974) and Residential Building (pre-1897), hazardous building materials may be present within the Site buildings. Ransom recommends the performance of a comprehensive Hazardous Material Inventory (HMI) survey prior to demolition of the Site Buildings.

- Ransom recommends that sub-slab soil samples be collected along the drainage pipes and on-Site sanitary sewer lines associated with the automotive repair floor drains (REC 1). In an effort to target potential heavily impacted areas, video inspection of the pipes for evidence of cracks or breaches could be conducted as part of the geophysical survey recommended below. Based on the findings of the video inspection, soil sampling could be biased towards those areas of pipe cracks/breaches.

- Ransom recommends the completion of a geophysical survey across the Site in an effort to: (1) confirm the removal of the 3,000-gallon fuel oil UST (REC 5) and 550-gallon waste oil UST (REC 6) presumably removed from the Site in 1995, and (2) assess if one or more historic USTs, former product piping, and/or septic tanks are present from the current/former residential use (REC 8). If anomalies are identified, further subsurface investigation may be warranted.

- A subsurface soil and groundwater investigation is recommended prior to the initiation of construction activities. Ransom recommends the following soil and groundwater monitoring program be completed prior to redevelopment activities:

    - Ransom recommends the collection of sub-slab soil and groundwater samples from beneath the current/former hydraulic lifts and one hydraulic alignment rack (RECs 2A and REC 2C) within the Lot 30 Site Building.

    - Ransom recommends the collection of sub-slab soil samples from beneath the five identified wall-mounted hydraulic fluid reservoirs (REC 2B) within the Lot 30 Site Building immediately adjacent to the exposed subsurface piping.

    - Ransom recommends the collection of sub-slab soil samples immediately adjacent to the three floor-mounted control boxes (REC 2D) within the Lot 30 Site Building.

    - Ransom recommends the collection of subsurface soil and groundwater samples in the locations of the former 3,000-gallon fuel oil UST (REC 5) and 550-gallon waste oil UST (REC 6).

    - Ransom recommends the collection of subsurface soil samples at the location of the crack observed near the former waste oil drum storage/staining (REC 7).

    - Ransom recommends the collection of subsurface soil samples at the location of the potential historical fill area (REC 9).

    - Ransom recommends the installation of temporary groundwater monitoring points and/or soil borings along the southern boundary of the Site to evaluate potential off-Site impacts to the Site (REC 10).

- Since there were physical obstructions (e.g., stored vehicles, dirt, welded doors, etc.), which represent a significant data gap, and based on historical operations, Ransom recommends the physical obstructions be removed and further inspection completed of the ground surface areas beneath the former air compressor (REC 2E), the stored vehicles (REC 3), the inactive oil-fired burner (REC 4) and potential residential fuel-oil fired boiler (REC 8). Further investigation activities may be warranted based on the findings.

- Ransom recommends the proper disposal of the fuel oil-fired burner and its contents (e.g., waste ash) (REC 8) identified within the Lot 30 Site Building. After removal, Ransom recommends further inspection of the surface areas beneath the fuel oil-fired burner. Further investigation activities may be warranted based on the findings.

- 55-Gallon drums present on-Site should be removed from the Site and properly disposed of prior to Site construction activities, and documentation of their disposal should be maintained with a copy provided to CVS.

- On-Site drainage structures, including potential septic system components and/or storm water drainage structures (catch basins, etc.), that will not be reused as part of the Site redevelopment should be properly decommissioned according to local, state, and federal requirements. If evidence of contamination is identified during decommissioning of these structures, Ransom should be contacted to evaluate whether additional investigation or cleanup is warranted.

- Ransom recommends that miscellaneous chemicals, hazardous materials and/or stored appliances observed at the Site should be recovered/removed from the Site and properly disposed/recycled (by a certified technician where applicable) prior to proposed redevelopment activities.

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## 1.0 INTRODUCTION

The following report presents the findings of a Phase I Environmental Site Assessment (ESA) performed by Ransom Consulting, Inc. (Ransom) for the adjoined properties located at 13 Culver Street and 372 Riverdale Avenue in the City of Yonkers, Westchester County, New York (i.e., the Site), which includes Section 1, Block 129, Lots 26 and 30. A Site Location Map and Site Plan are included as Figures 1 and 2, respectively.

### 1.1 Purpose and Scope of Work

The purpose of this Phase I ESA was to document the environmental history of the Site, to evaluate the likelihood that a release of hazardous substances or petroleum products (HSP) has occurred or has the potential to impact the Site, and to provide our professional opinion regarding evidence of recognized environmental conditions (RECs) in connection with the Site. The term recognized environmental conditions means:

> *The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.*

The term REC also includes controlled RECs (CRECs) and historical RECs (HRECs), as defined below:

> The term CRECs means:
>
> *A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.*
>
> The term HRECs means:
>
> *A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.*

This Phase I ESA was performed in accordance with the requirements of the ASTM International E 1527-13. This project was also conducted in accordance with the Ransom's Corporate Services Agreement with CVS Pharmacy, Inc. (CVS) dated April 1, 2015 (the "Corporate Services Agreement"). The general purpose of this Phase I ESA was to evaluate the environmental condition of the Site for evidence of RECs in connection with the Site.

The scope of work for this Phase I ESA included the completion of the following tasks:

1. Review of municipal records and a search of state and federal environmental databases to identify sites of potential environmental concern for the Site and vicinity.

2. Review of reasonably ascertainable historical land use records for the Site and adjoining properties.

3. A site reconnaissance to observe current conditions.

4. Interviews with persons knowledgeable about the Site.

1.2 Limitations

This Phase I ESA was prepared exclusively for the use of T.M. Crowley & Associates, Inc. (TMC) and CVS Pharmacy, Inc., its parent, affiliates and subsidiaries and their successors, assigns, and grantees, collectively "the Users," and in accordance with the Corporate Services Agreement.

Along with the limitations set forth in various sections of the ASTM International E 1527-13 protocol, the accuracy and completeness of this report is limited by the following:

1. Access Limitations: Access limitations were encountered during site reconnaissance activities. Access to the Residential Building was limited to the eastern portion of the basement, as access to the upper floors was restricted due to safety concerns.

2. Physical Obstructions to Observations: The paved parking areas in the vicinity of the Lot 30 Site Building was observed with numerous parked vehicles; therefore, much of the paved areas surrounding the Lot 30 Site Building could not be observed. Additionally, three vehicles were parked over the hydraulic lifts within the service garage of the Lot 30 Site Building, specifically in Bay 2, Bay3, and Bay 6; therefore, these areas could not be observed. Numerous vehicles were also parked throughout the existing storage area in the northeastern most portion of the Lot 30 Site Building; therefore, concrete slab/floor conditions could not be observed. Additionally, two metal doors were observed to be welded shut during site reconnaissance activities of the Residential Building, further barring access to this building. Lastly, the area around the inactive fuel-oil fired boiler was cover in dirt and located in a dimly lit room; thereof conditions of the concrete surface could not be fully assessed.

3. Outstanding Information Requests:

   The United States Army Corps of Engineers (USACE) have not provided information in response to Ransom's information requests regarding wetlands permits and violations. On May 9, 2017, the USACE responded and stated that files were available for review, and that a file search was underway. At the time this report was prepared; however, Ransom was awaiting further response regarding the duplication of the files. Upon receipt and review, pertinent information will be provided in an addendum to this report.

   The City of Yonkers Fire Department have not provided information in response to Ransom's information requests regarding incident records. On May 11, 2017, the City of Yonkers Fire Department was contacted by Ransom and the request was re-initiated. At the time this report was prepared; however, Ransom was awaiting further response regarding the duplication of files. Upon receipt and review, pertinent information will be provided in an addendum to this report.

Freedom of Information Law requests were submitted to the New York State Department of Environmental Conservation (NYSDEC) regarding spill incidents for the Citgo service station located at 380 Riverdale Avenue, Yonkers NY on May 12, 2017. At the time this report was prepared, Ransom had not received a response from the NYSDEC. Upon receipt and review, pertinent information will be provided in an addendum to this report.

4. Historical Data Source Failure: The Site's first developed use could not be determined. Topographic maps, aerial photographs, and Sanborn maps suggest that the Site was developed as residential properties as early as 1897; however, prior use cannot be confirmed. This represents historical data source failure according to ASTM E 1527-13; however, based on the known prior use of the Site for residential purposes, this data source failure does not represent a significant concern warranting additional investigation.

5. Significant Assumptions: Based on Ransom's Site observations and review of United States Geological Survey (USGS) maps, Ransom assumes groundwater follows topographic gradient and flows to the north/northwest toward the Hudson River, located approximately 0.46-miles to the west of the Site. Also, based on known information, the USTs referenced within the City's permitting documentation indicated that removal activities for two USTs were completed by September 1995; however, documents reviewed did not reference UST contents or capacities; Ransom assumed this documentation to be the removal of one 3,000-gallon fuel oil UST and one 550-gallon waste oil UST; however, detailed UST removal documentation was not identified by Ransom.

6. Exceptions: None.

7. Deviations: Per the Corporate Services Agreement with CVS, Ransom performed a limited visual assessment and/or research related to suspect asbestos, lead-based paint, polychlorinated biphenyl (PCB) containing equipment, mercury-containing fluorescent lamps and other equipment, radon, and wetlands.

8. Other: None.

### 1.3 User Provided Information

An ASTM User Questionnaire was completed by Ms. Kristen Walker of TMC on April 28, 2017. On May 9, 2017 Ransom also interviewed Mr. Daniel Romano, the property owner. A copy of the User Questionnaire is included in Appendix H, as Supplemental Documentation.

#### 1.3.1 Title Records

Title records in connection with the Site were provided by the Office of the Westchester County Clerk Online Records Review system available at https://wro.westchesterclerk.com. No environmental liens or activity/use restrictions regarding the Site were included within the property deeds. A review of the available title records is summarized in Section 3.2 of this report.

#### 1.3.2 Environmental Liens or Activity and Use Limitations

No activity and use limitations (AULs) were identified by the User for the Site, nor were AULs identified in the current property deeds.

### 1.3.3 Specialized Knowledge

No specialized knowledge in connection with the Site or facility operations was provided by the User.

### 1.3.4 Commonly Known or Reasonably Ascertainable Information

No commonly known or reasonably ascertainable information about the Site that is material to RECs in connection with the Site was provided by the User.

### 1.3.5 Valuation Reduction for Environmental Issues

The User did not identify a reduction in the purchase price of the Site, compared to the fair market value.

### 1.3.6 Owner, Property Manager, and Occupant Information

No information pertinent to RECs in connection with the Site was provided by the owners, property managers, or occupants with the exception of that information presented in the remainder of this document.

### 1.3.7 Reason for Performing Phase I ESA

This Phase I ESA was performed as part of environmental due diligence to support a property transaction involving the Site.

### 1.3.8 Previous Environmental Reports

At the time this report was prepared, no knowledge or documentation regarding previous environmental investigations, assessments, and/or remedial activities performed at the Site were identified by Ransom.

## 2.0 PROJECT LOCATION/DESCRIPTION

### 2.1 Site Location and Description

The Site is located at the northeast corner of the intersection of Culver Street and Riverdale Avenue in the City of Yonkers, Westchester County, New York. For the purpose of this Phase I ESA, the Site consists of two parcels of land encompassing a total of approximately 1.02-acres and is identified by the City of Yonkers Assessor's Office as 13 Culver Street and 372 Riverdale Avenue, Section 1, Block 129, Lots 26 and 30, respectively.

The Lot 26 portion of the Site is currently developed with a two and a half-story, 1,320-square foot Residential Building with a full basement, constructed sometime prior to 1897. The Lot 30 portion of the Site is currently developed with one 8,695-square foot commercial structure, constructed sometime in 1974, which is currently occupied by West Coast Autos Sales, an automotive sales company. The Lot 30 Site Building previously operated as a Goodyear branded automotive repair shop and tire sales center from 1974 until 2015. The Lot 30 Site Building consists of eight automotive garage bays within the service garage, two restrooms, a former employee locker room, boiler room, storage areas, two offices, and showroom. The remainder of the property consists of concrete walkways and asphalt paved parking surfaces, with an area of limited landscaping consisting of several trees and bushes between the Lot 26 and Lot 30 portions of the Site.

The Site is located in a mixed commercial and residential area of the City of Yonkers. Properties to the north of the Site are primarily residential. Properties to the south of the Site, across Culver Street, are primarily residential, with the exception of a Citgo-branded gasoline filling station. Further south of the Citgo-branded gasoline filling station is the Devonshire Discount Tire, Auto Body & Repair Center. The PEARLS Hawthorne Elementary School is located to the west of the Site, across Riverdale Avenue. The property to the east of the Site is a City of Yonkers operated park, known as Culver Park.

The Site is located on the City of Yonkers, New York, U.S. Geological Survey (USGS) 7.5-minute series Quadrangle and is located at the approximate Universal Transverse Mercator (UTM) coordinates of 4,530,414 meters north and 592,563 meters east. The latitude and longitude of the Site are 40° 55' 10.5636" and -73° 54' 1.908", respectively. A Site Location Map is provided as Figure 1 (Appendix A). A Site Plan and photograph log are included as Appendices B and D, respectively.

### 2.2 Site Utilities

Based on information provided by Mr. Daniel Romano, the property owner, the Lot 30 Site Building is currently connected to water and sanitary sewer service provided by the City of Yonkers. Historical Site plans indicate that the Lot 30 Site Building has bene connected to the municipal water and sanitary sewer system since the building was erected, sometime in 1974. A total of 15 current, closed, or former floor drains were observed within the Lot 30 Site Building, which reportedly discharge to the sanitary sewer system. Electric and natural gas (for heat) service to the Lot 30 Site Building is provided by the Consolidated Edison Company of NY, Inc. (ConEdison), where a roof-mounted heating, ventilation, and air conditioning (HVAC) system was utilized. Solid waste removal is the responsibility of the tenant. Overhead heaters were observed during site reconnaissance activities within the service garage of the Lot 30 Site Building. Based on records provided by the City of Yonkers Building and Housing Department, one 3,000-gallon fuel oil UST was removed from the eastern side of the Lot 30 Site Building in sometime in or around August 1995, indicating the use of the oil-fired burner and fuel oil prior to this time.

Additionally, according to Mr. Daniel Romano, all utility services to the Residential Building has been discontinued. Records identified through the City of Yonkers City Clerk's Office indicate that the fuel oil was historically utilized at the Residential Building. No additional information regarding utilities at the Residential Building was identified by Ransom, including the presence or absence of a septic system.

## 2.3 Environmental Setting

### 2.3.1 Topography

Based on field observations, topography at the Site generally slopes downward to the north-northwest. According to the Yonkers, New York-New Jersey, 7.5-Minute USGS Quadrangle, dated 2013, the topography in the immediate vicinity of the Site declines to the north-northwest; however, the topography in the greater area of the Site declines to the west, toward the Hudson River, located approximately 0.46-miles to the west of the Site. The elevation of the Site is approximately 50-feet above mean sea level on the North American Vertical Datum (NAVD) of 1988.

### 2.3.2 Soils/Geology

Based on a review of the U.S. Department of Agriculture's (USDA) Web Soil Survey, the Site is underlain by Urban land-Woodbridge complex soils, with 3 to 8 percent slopes (UwB). Urban land soils consist of natural and disturbed soil material overlain by man-made structures, including buildings and asphalt. Woodbridge soils consist of fine sandy loams from 0 to 7-inches below grade, fine sandy loams from 7 to 30-inches below grade, and gravelly fine sandy loams from 30 to 65-inches below grade. Woodbridge soils are derived from coarse-loamy lodgment till derived from gneiss, granite, and/or schist.

### 2.3.3 Hydrogeology

Based on Ransom's observations of Site topography, groundwater at the Site is anticipated to generally flow to the north-northwest, toward the Hudson River. The Hudson River is located approximately 0.46 miles to the west of the Site.

### 2.3.4 Surface Water Bodies

Surface water bodies were not observed at or adjacent to the Site. The nearest body of water is the Hudson River located approximately 0.46-miles to the west of the Site.

### 2.3.5 Wetlands

According to the U.S. Fish and Wildlife Service National Wetlands Inventory website and delineated wetlands are not located at the Site or adjacent properties.

On May 8, 2017, Ransom submitted a Freedom of Information Act (FOIA) request to the United States Army Corps of Engineers (USACE) regarding wetlands or wetlands violates at the Site. On May 9, 2017, the USACE responded and stated that files were available for review, and that a file search was underway. At the time this report was prepared, however, Ransom was awaiting further response regarding transmittal of the files. Upon receipt and review, pertinent information will be provided in an addendum to this report.

### 2.3.6 Flood Plains

The Site is located on the Federal Emergency Management Agency (FEMA) Flood Insurance Map (Parcel 36119C0317F). Based on the FEMA map, the Site is not located within a designated Flood Zone.

### 2.3.7 Potential for Radon Gas

According to the EDR Report, the U.S. Environmental Protection Agency (U.S. EPA) Radon Zone Classification for Westchester County, NY is 3, which is defined by U.S.EPA as an indoor average level less than 2 picoCuries/Liter (pCi/L). The average radon concentrations of the 650 sites tested in the same zip code as the Site were 1.730 pCi/L for basement areas and 0.930 pCi/L for living areas, which are below the U.S. EPA residential action level of 4.0 pCi/L. Based on the radon concentration information provided in the EDR Report and the proposed slab on grade construction and commercial use of the Site, radon abatement activities should not be necessary. A copy of the EDR report is provided in Appendix E.

## 3.0 HISTORICAL/RECORDS REVIEW

### 3.1 Summary

Ransom determined the Site history based on an interview with the property owner, historical topographic maps, historical aerial photographs, historical Sanborn maps, and historical city directories.

The Site was developed as multiple separate residential properties as early as 1897. The Site originally was comprised of nine separate lots with ten residential structures, identified on historical maps as 366, 370, 372, 374, 376 and 378 Riverdale Avenue and 15, 17, 21, and 21R Culver Street. Historically, the Residential Building located on the Site has been identified as both 13 Culver Street and 15 Culver Street. By as early as 1973, the residential structures previously located at 17, 21, and 21R Culver Street, and 372, 374, 376, and 378 had been cleared from the Site. Construction of the Lot 30 Site Building was completed by as early as May 1974, at which time the Goodyear Tire & Rubber Co. took up occupancy. Commercial improvements to the Lot 30 portion of the Site were completed in June of 1980, at which time two remaining residential structures, located to the north of the Lot 30 Site Building, were removed from the Site and a paved parking area was installed. The Residential Building located at 13 Culver Street is the only remaining residential structure on-Site. The Goodyear Tire & Rubber Co. operated as an automotive repair and tire sales center from 1974 until 2015. The West Coast Custom Auto Sales company, an automotive sales company, took up occupancy of the Lot 30 Site Building sometime June 2016 and is the current occupant.

Occupancy of the Residential Building has been strictly residential from as early as 1897 through sometime in 2009, at which time the Residential Building was vacated, as it remains currently. The northern portion of the Lot 26 portion of the Site is currently utilized for vehicle storage by a neighboring property owner, no further information was identified regarding current property usage of the Residential Building and surrounding property.

### 3.2 Title Records

The Site is identified on the City of Yonkers Assessor's Tax Map Section 1, Block 129, Lots 26 and 30. The following property ownership records were identified from information provided through the Office of the Westchester County Clerk – Westchester Records Online portal https://wro.westchesterclerk.com:

| **13 Culver Street, Yonkers NY** | | | | |
|---|---|---|---|---|
| **Parcel** | **Address** | **Grantor** | **Grantee** | **Date** |
| Block: 151, Lot 8 | 401 Riverdale Avenue, Yonkers NY | New York State Department of Transportation – Real Property Division | Newross Realty Corp. c/o Jack Toal, Andrew Sunull, Lilly McNeil, and Joseph Bera | September 17, 1980 |
| Block: 129, Lot 26 | 15 Culver Street, Yonkers NY | Floyd Freeman, as Administrator of the Estate of Lillie Mae McNeil | Floyd Freeman | January 19, 1995 |
| Block: 129, Lot 26 | 15 Culver Street, Yonkers NY | Floyd Freeman | Floyd Freeman and Lucy Freeman | January 19, 1995 |
| Block: 129, Lot: 26 | 15 Culver Street, Yonkers NY | Lucy Ruth Freeman, as Executor of the | Lucy Ruth Freeman | April 12, 2004 |

| | | | | |
|---|---|---|---|---|
| | | Estate of Floyd Freeman | | |
| Block: 129, Lot 26 | 15 Culver Street, Yonkers NY | Freeman, Lucy R | 15 Culver St Realty Corp | December 24, 2014 |
| Block: 129, Lot: 26 | 15 Culver Street, Yonkers NY | 15 Culver Street Realty Corp. | Dutchman Realty LLC | February 3, 2017 |

| **372 Riverdale Avenue, Yonkers NY** | | | | |
|---|---|---|---|---|
| **Parcel** | **Address** | **Grantor** | **Grantee** | **Date** |
| Block: 129, Lot: 37, 38, and 39 | 366 Riverdale Avenue, Yonkers, NY | Joseph Meechan and Elizabeth K. Meechan | Luma Realty Inc. | July 31, 1969 |
| Block: 129, Lot: 32 | 378 Riverdale Avenue, Yonkers, NY | Georgianna Mann | Luma Realty Inc. | September 10, 1970 |
| Block: 129, Lot: 33 | 376 Riverdale Avenue, Yonkers, NY | Rachel Coleman | Luma Realty Inc. | June 19, 1971 |
| Block: 129, Lot: 34 | 374 Riverdale Avenue, Yonkers, NY | Max Fabel and Pauline Fabel | Luma Realty Inc. | October 1, 1972 |
| Block: 129, Lot: 36 | 370 Riverdale Avenue, Yonkers, NY | Laurette Walsh | Luma Realty Inc. | December 22, 1972 |
| Block: 129, Lot: 30 | 372-8 Riverdale Avenue, Yonkers, NY | Luma Realty, Inc. | Mary Louise Romano | December 28, 1988 |
| Block: 129, Lot: 30 | 372-8 Riverdale Avenue, Yonkers, NY | Mary Louise Romano | Mary Louise Romano and John N. Romano | June 1, 2000 |
| Block: 129, Lot: 30 | 372 Riverdale Avenue, Yonkers NY | John N. Romano | Mary Louise Romano | November 1, 2003 |
| Block: 129, Lot: 30 | 372 Riverdale Avenue, Yonkers NY | Mary L. Romano | Mary Louise Romano Irrevocable Income Only Trust Fund / Andrew Romano | February 14, 2012 |
| Block: 129, Lot: 30 | 372 Riverdale Avenue, Yonkers NY | Mary L. Romano Irrevocable Income Only Trust Fund | Andrew M. Romano and Daniel P. Romano | May 28, 2013 |

### 3.3 Prior Use Interviews

Ransom interviewed Mr. Daniel Romano, the property owner, on May 9, 2017 regarding prior Site use. Mr. Romano informed Ransom that the Goodyear Tire & Rubber Co. operated as an automotive repair facility and tire sales center from 1974, at which time the Lot 30 Site Building was constructed, through sometime in 2015. Mr. Romano indicated that the Lot 30 Site Building was currently occupied by a used car dealership identified as the West Coast Custom Auto Sales company. Mr. Romano indicated that a heating oil tank was utilized for the Lot 30 Site Building, but was unaware of removal activities. Mr. Romano informed Ransom that the Residential Building had been vacant since sometime in 2009, and was heated by natural gas provided by ConEdison. Mr. Romano also indicated that the northern portion of the Lot 26 portion of the Site was currently being utilized as a vehicle storage area by a neighboring property owner; however, further information was not provided.

## 3.4 Local, State, and Federal Government Agency Record Review

### 3.4.1 City of Yonkers Assessor's Office

Information provided by the City of Yonkers Assessor's Office included current property cards and tax maps for the Site properties. Copies of the property cards and tax maps are included in Appendix H. Information provided by the Assessor's Office regarding the Site history coincided with information discussed in Section 3.1 of this report. Information pertaining to potential underground or aboveground storage tanks, hazardous waste storage, and/or adverse environmental conditions at the properties was not provided on the property cards. No additional information was provided by the City of Yonkers Assessor's Office.

### 3.4.2 City of Yonkers Building and Housing Department

Information provided by the City of Yonkers Building and Housing Department included various building permits for alterations and improvements of the Site Buildings. On May 9, 2017, Ransom reviewed available files provided by the City of Yonkers, which included the following pertinent permitting/inspection documents reviewed for the Lot 30 Site Building/property located at 372 Riverdale Avenue:

- Construction Plan: Proposed construction plans dated sometime in 1973 detailed the proposed Lot 30 Site Building engineering plans. Specifically, the plans indicated that a 550-gallon waste oil UST was to be installed on the southeast exterior corner of the Lot 30 Site Building. This waste oil UST was associated with historic automotive repair activities at the Site. This construction plan additionally illustrated that location for the 3,000-gallon fuel oil UST on the eastern exterior of the Lot 30 Site Building with an associated pump and appurtenant piping that connected to fuel-oil fired boiler inside the eastern portion of the Lot 30 Site Building. The plans also indicated seven hydraulic lifts and one hydraulic alignment rack were to be installed with the service bays of the Lot 30 Site Building with associated control boxes. The plans detailed a cross-section of the proposed underground lift housing and hydraulic oil reservoirs plans. They also depicted a floor drainage plan, where on-Site floor and roof drain (where roof venting operations were detailed) drain to the sanitary sewer system.

- Certificate of Occupancy: A Certificate of Occupancy dated June 12, 1973 listed Luma Realty as the property owner for the Lot 30 portion of the Site and the Goodyear Tire & Rubber Co. as the tenant.

- Construction Plan: Construction plans dated October 12, 1979 detail plans to demolish the remaining residential structures on the northwest portion of the Site.

- Permit Application: A permit application was submitted on July 7, 1980 for the construction of an open air paved parking area in the vicinity of the Lot 30 Site Building, in the location of the former residential structures on-Site.

- Permit Application: A permit application was submitted on June 26, 1995 by Mr. John Romano requesting permission for the removal of underground storage tanks.

- Certificate of Completion: A certificate of completion was issued on August 14, 1995 to Ms. Mary Romano for the removal of underground oil tanks for the property located at 372 Riverdale Avenue, Yonkers NY.

- Permit Application: A permit application was submitted on June 16, 2016 by Mr. Andrew Romano to complete Site improvement activities to the Lot 30 Site Building. The application was listed as denied by the City of Yonkers Building and Housing Department.

- Permit Application: A permit application was submitted on April 7, 2017 to complete improvement activities to the Lot 30 Site Building, which was subsequently denied by the City of Yonkers Housing and Building Department. Plans included within this application indicated that a flue pipe connected to the hot water heater was not properly vented and was venting carbon monoxide to the interior of the Lot 30 Site Building. Plans also indicated that the overhead gas radiant heaters within the service garage were damaged.

The following pertinent permitting/inspection documents reviewed for the Residential Building/property located at 13 Culver Street were identified:

- Permit Application: A permit application was submitted on July 10, 1956 to complete improvements/alterations to the basement of the Residential Building.

- Permit Amendment: A permit amendment was submitted on September 10, 1957 for alterations/additions to the porch of the Residential Building.

- Permit Approval: A permit approval dated September 18, 1958 granted additions and alterations to the Residential Building to the property owner, Mr. William McNeill.

- Permit Application: A permit application dated sometime in 1975 was submitted for the addition of two restrooms to the first floor of the Residential building.

Copies of the permitting documentation reviewed above are included in Appendix H, as Supplemental Documentation.

Information provided by the Building Department regarding Site history coincided with information discussed in Section 3.1 of this report. The files reviewed at the Building Department did not include information pertaining to adverse environmental conditions at the Site.

### 3.4.3 City of Yonkers Fire Department

A request for information was submitted to The City of Yonkers Fire Department on May 1, 2017; however, at the time this report was prepared, Ransom was awaiting further response regarding the request. Upon receipt and review, pertinent information will be provided in an addendum to this report.

### 3.4.4 City of Yonkers Public Works Department

No pertinent information regarding current and/or former water use or sewage disposal was provided by the City of Yonkers Public Works Department.

### 3.4.5 Westchester County Department of Health

A request for information was submitted to the Westchester County Department of Health of May 1, 2017. On May 10, 2017, the Westchester County DOH responded that Ransom's request for information had been received and that documents will be received by June 9, 2017. On June 7, 2017, a verbal response was received from Ms. Caren Halbfinger, the Public Affairs Director, of the Westchester County Department of Health that no records were available for review for the Site and documentation confirming this will be received by June 9, 2017.

### 3.4.6 New York State Department of Environmental Conservation

Freedom of Information Law requests were submitted to the NYSDEC regarding spill incidents for the Citgo service station located at 380 Riverdale Avenue, Yonkers NY on May 12, 2017. At the time this report was prepared, Ransom had not received a response from the NYSDEC. Upon receipt and review, pertinent information will be provided in an addendum to this report.

## 3.5 Historical Maps

Sanborn Maps

Sanborn Fire Insurance Maps dated 1898, 1917, 1942, 1951, 1956, 1957, 1971, 1973, 1978, 1989, 1991, and 2004 were provided by EDR. The following is a description of the Site and the surrounding properties. The Certified Sanborn Map Report is included in Appendix F.

**1898 Sanborn Map:** The Site consisted of ten residential dwellings. The property located at present-day 13 Culver Street was depicted with a two-and a half story residential dwelling and one two-story stable/outbuilding. The remainder of the Site consisted of nine residential dwellings, historically identified as 366, 370, 372, 374, 376, and 378 Riverdale Avenue and B, C, D, and H Culver Street. The C Culver Street property was identified as "Low Ground." The adjacent property to the north of the Site consisted of one residential dwelling, identified as 362 Riverdale Avenue. The adjacent property to the east of the Site consisted of vacant land. The adjacent property to the south of the Site, across Culver Street, consisted of the Yonkers Railway Co. Car Barn. The adjacent properties to the west of the Site, across Riverdale Avenue, consisted of three residential dwellings, identified as 369, 371, and 373 Riverdale Avenue. Properties located further north of the Site have been improved with residential dwellings.

**1917 Sanborn Map:** The Site consisted of a total of ten residential dwellings, including the Residential Building identified as present day 13 Culver Street. Two residential properties located on the Site, 374 and 376 Riverdale Avenue, consisted of commercial storefronts along Riverdale Avenue. The residential properties identified as B, C, D, and H Culver Street are now depicted as 15, 17, 21, and 21R Culver Street, respectively. Three stables/outbuildings were identified on the northeast portion of the Site and one automotive use outbuilding was identified on the north-central portion of the Site. No significant changes were observed to the adjacent properties to the north or west of the Site. The adjacent properties to the south of the Site have been improved with residential dwellings identified as 14, 16, 18, 20, 22, and 24 Culver Street and 380, 382, 384, and 386 Riverdale Avenue, and the car barn is no longer depicted. The property to the east of the Site has been occupied by the Cast Stone Products Inc. company and improved with a cement storage area and office building.

**1942 Sanborn Map:** No major changes were noted to the Site or adjacent properties to the north when compared to the 1917 Sanborn map. The adjacent property to the east of the Site has been improved with four structures, of which the southwestern most structure was identified as an automobile garage. Adjacent properties to the south of the Site have been improved with residential dwellings identified as 6, 8, 10, and 12 Culver Street. Further south the property located at 390 Riverdale Avenue has been improved with a large rectangular commercial structure identified as the Ludlow Garage. The adjacent property to the west of the Site, identified as 373 Riverdale Avenue, has been cleared of residential dwellings. Additional residential dwellings were noted to the southwest of the Site across the intersection of Riverdale Avenue and Culver Street. The Hawthorne High School (present-day PEARLS Hawthorne School) was noted further west of the Site.

**1951 Sanborn Map:** The Site consisted of nine residential structures, including the Residential Building on the southeast portion of the Site. The three outbuildings located to the north of the Residential Building are no longer visible. Three automotive garage/outbuildings are identified on north-central portion of the Site. Two adjacent properties to the north, identified as 74 and 76 Post Street, have been improved with automobile garages/outbuildings. The adjacent property to the west, across Riverdale Avenue (373 Riverdale Avenue), has been improved with one commercial structure identified as a gasoline filling station with a canopy and six gasoline storage tanks. No major changes were noted on adjacent properties to the north, east, or south of the Site when compared to the 1942 Sanborn map.

**1956 Sanborn Map:** No major changes were noted to the Site or adjacent properties when compared to the 1951 Sanborn map.

**1957 Sanborn Maps:** No major changes were noted to the Site or adjacent properties when compared to the 1956 Sanborn map with the exception of the filling station property to the west of the Site, which no longer depicted the canopy or the six gasoline storage tanks.

**1971 Sanborn Map:** No major changes were noted to the Site or adjacent properties to the north or west of the Site. The adjacent property to the east has been cleared of all structures and was converted to a park/playground consistent with the location of present day Culver Park identified on historic aerial maps. The adjacent property to the south of the Site identified as 380 to 382 Riverdale Avenue was cleared of the previously identified residential dwellings and converted to vacant land.

**1973 Sanborn Map:** The residential dwellings previously identified as 372, 374, 376, and 378 Riverdale Avenue and 17, 21 and 21R Culver Street have been cleared from the Site. On the 1973 Sanborn map, the Site consisted of three residential dwellings, identified as 15 Culver Street (present-day Residential Building), 360 Riverdale Avenue, and 370 Riverdale Avenue. The Site additionally consisted of three automotive storage garage structures with the remainder of the Site consisting of vacant land. No major changes were noted on adjacent properties to the north, east, or west of the Site when compared to the 1973 Sanborn map. The adjacent property to the, previously identified as 386 Riverdale Avenue, was cleared of the residential dwelling.

**1978 Sanborn Map:** The Site has been improved with one irregular shaped commercial structure, consistent with the present-day construction of the Lot 30 Site Building, and paved parking areas. Three residential structures are identified on the Site. The adjacent property to the south, across Culver Street, identified as 38 Culver Street, has been improved with a commercial structure and potential UST field identified as a gasoline filling station at the location of the present day Citgo-branded service station. No significant changes were noted to adjacent properties to the west, southeast, or north of the Site when compared to the 1973 Sanborn map.

**1989 Sanborn Map:** Two residential dwellings, previously identified as 366 and 370 Riverdale Avenue, are no longer depicted the northwest portion of the Site. No significant changes were noted to the Lot 30 Site Building or adjacent properties to the north, east, or south of the Site when compared to the 1978 Sanborn Map. The gasoline filling station located on the adjacent property to the west of the Site, across Riverdale Avenue, is no longer depicted and the property was acquired by the Nathanial Hawthorne Junior High School. Residential dwellings previously located on the southwest corner of intersection of Culver Street and Riverdale Avenue are no longer identifiable on the 1989 Sanborn map and the property has been converted to vacant land. No significant changes to adjacent properties to the north, east, or south of the Site were noted when compared to the 1978 Sanborn map.

**1991 Sanborn Map:** No significant changes were noted to the Site or adjacent properties to the north, south, east, or west of the Site when compared to the 1989 Sanborn map.

**2004 Sanborn Map:** No significant changes were noted to the Site or adjacent properties to the north, south, east, or west of the Site when compared to the 1991 Sanborn map.

Historical Topographic Maps

Historical topographic maps dated 1897, 1898, 1900, 1947, 1956, 1966, 1979, 1995, 1998, and 2013 were provided by EDR. The following is a description of the Site and the surrounding properties. The EDR Historical Topographic Map Report is included in Appendix F.

**1897 Topographic Map:** The Site appears to be developed with a row of structures presumably the identified residential structures depicted on the 1898 Sanborn map. The surrounding area appears to be moderately developed, with structures denoted by black squares on adjacent properties to the north, south, and west of the Site. The Site and surrounding properties are depicted on yellow shaded land. Three separate railroad lines, each a line of the Hudson River Railroad, are depicted as running parallel to the Hudson River to the east and west of the Site. A roadway corresponding with the location of Riverdale Avenue is present on the map as well as a roadway corresponding with Culver Street.

**1898 Topographic Map:** Increased development was observed in the general vicinity of the Site. No discernable changes were observed on the Site or on adjacent properties when compared to the 1897 topographic map.

**1900 Topographic Map:** No significant changes were observed when compared to the 1898 topographic map.

**1947 Topographic Map:** The Site is depicted as mostly white developed (presumably residential) land, with the a larger structure on the eastern portion of the Site, originating at the corner of present day Livingston Avenue and Culver Street. The adjacent property to the south appears developed by the presence of a black square (typically denoting a structure). The adjacent property to the east appears developed and the presence of a roadway corresponding to the present-day Cliff Avenue was observed as well. An increased amount of development was observed in the surrounding area when compared to the 1900 topographic map, most notably to the north of the Site. Areas marked as green representing vegetated areas are depicted further south, southwest, east, and northeast of the Site.

**1956 Topographic Map:** The Site and surrounding area are depicted on red shaded, indicating an area of increased development and/or paving. No structures are denoted on the Site or adjacent properties. The Hawthorne High School Building is depicted at the intersection of Culver Street and Hawthorne Avenue,

to the west of the Site. Areas marked as green representing vegetated areas are depicted further southwest, east, and northeast of the Site.

**1966 Topographic Map:** The Site and surrounding area are depicted on red shaded land, indicating an area of increased development. No structures are denoted on the Site or adjacent properties. No significant changes were observed when compared to the 1956 topographic map.

**1979 Topographic Map:** No significant changes to the Site or surrounding properties was depicted on the 1979 topographic map. A slight increase in the amount of developed properties can be observed as purple marked squares, which represent newly built structures when compared to the most recent previous topographic map.

**1995, 1998 Topographic Maps:** No significant changes were observed to the Site or surrounding properties when compared to the 1979 topographic map.

**2013 Topographic Map:** The Site and surrounding area are depicted as white shaded land. No discernable structures are observed on the Site or surrounding properties.

### 3.6 Aerial Photography

Aerial photographs of the Site and surrounding properties dated 1940, 1951, 1954, 1962, 1974, 1976, 1984, 1989, 1991, 1994, 1995, 2006, 2008, 2009, 2010, 2011 were provided by EDR. The following is a description of the Site and the surrounding properties. The EDR Aerial Photo Decade Package is included in Appendix C.

**1940 Aerial Photograph:** The Site consisted of presumably residentially developed land, with individual residential structures identifiable on the aerial photograph; however, the number of structures was unable to be determined due to the quality of the photograph. South of the Site, across Culver Street, consisted of several presumably residential structures. West of the Site, across Riverdale Avenue, a larger structure is identifiable on the northwest corner of the intersection of Riverdale Avenue and Culver Street (identified as a filling station on the Sanborn Maps). Additionally, a structure corresponding to the present-day location for the PEARLS Hawthorne School is identifiable further west of the Site, at the northeast corner of the intersection of Culver Street and Hawthorne Avenue. The property to the east of the Site was appears partially developed with at several identifiable structures. North of the Site consisted of potentially residential dwellings.

**1951 Aerial Photograph:** The Site consisted of at nine residential structures. No major changes were noted at the adjacent properties in comparison to the 1940 aerial photograph.

**1954 Aerial Photograph:** No major changes were noted to the Site or adjacent properties when compared to the 1951 aerial photograph.

**1962 Aerial Photograph:** No major changes were noted to the Site or adjacent properties to the north or south of the Site in comparison to the 1954 aerial photograph. The adjacent property to east of the Site has been cleared and no visible structures remain on this property, consistent with the present-day location for Culver Park. The property to the west of the Site, across Riverdale Avenue, appears to be a smaller building for filling station operations, consistent with the 1957 and 1971 Sanborn Maps. The property further to the west of the Site, appears to have been improved with a larger rectangular structure, which is consistent with the present-day building configuration of the PEARLS Hawthorne School.

**1974 Aerial Photograph:** Six of the residential structures previously identified on the Site have been removed and the Site has been improved with one large commercial structure, consistent with the present-day building construction for the Lot 30 Site Building and paved surface areas surrounding the Lot 30 Site Building. Two residential structures remained on the Site to the northwest of the Lot 30 Site Building. One residential structure, identified as the present-day on-Site Residential Building (13 Culver Street), is visible to the east of the Lot 30 Site Building. No major changes were noted to the adjacent properties to the north, west, and east of the Site. The adjacent property to the south of the Site, located at the southeast corner of the intersection of Riverdale Avenue and Culver Street, was cleared of three residential structures and improved with one small structure and one square-shaped canopy, indicative of a gasoline fueling station. This property coincides with the present-day location for the Citgo-branded gasoline fueling station.

**1976 Aerial Photograph:** Due to the poor image quality, the Site and adjacent properties are not clearly discernable on the 1976 aerial photograph.

**1984 Aerial Photograph:** The two residential structures to the northwest of the Lot 30 Site Building are no longer visible and presumed to have been cleared from the Site and turned into a commercial parking lot area. The Site appears to have been improved with additional paved areas in the location of the former residential structures. No major changes were noted at the adjacent properties in comparison to the 1976 aerial photograph with the exception of the filling station to the west no longer being present.

**1989 Aerial Photograph:** Due to the poor image quality, the Site and adjacent properties are not clearly discernable on the 1989 aerial photograph.

**1991 Aerial Photograph:** No major changes were noted at the Site or adjacent properties to the north, west, or south when compared to the 1984 aerial photograph. The property to the east of the Site was improved with paved basketball courts, consistent with the current location of Culver Park.

**1994, 1995, 2006 Aerial Photographs:** No major changes were noted at the Site or adjacent properties in comparison to the 1991 aerial photograph.

**2008 Aerial Photograph:** No major changes were noted at the Site or adjacent properties to the north or west when compared to the 2006 aerial photograph. The property to the east of the Site, identified as Culver Park, has been improved with a reconfiguration of the basketball courts and an area of disturbed paving/surface material was noted on the northern portion of this property. The property to the south of the Site, across Culver Street, identified as a Citgo-branded gasoline fueling station, appears to have been improved with a larger, rectangular shaped, canopy.

**2009 Aerial Photograph:** No major changes were noted at the Site or adjacent properties to the north, west, or south when compared to the 2008 aerial photograph. The adjacent property to the east of the Site, identified as Culver Park, has been improved with the construction of two play areas/equipment on the northern portion of the property, consistent with the present-day configuration of this property.

**2010, 2011 Aerial Photographs:** No major changes were noted at the Site or adjacent properties to the north, west, south, or east when compared to the 2009 aerial photograph.

## 3.7 Historical City Directories

To assist in identifying land use at the Property, Ransom identified historical city directories from EDR. Directories dated 1972 through 2013 were provided by EDR. The Property is located at 13 Culver Street and 372 Riverdale Avenue, Yonkers, NY. The following listings were provided regarding the Property address:

| Year | Address | Name | Operation |
|---|---|---|---|
| 1982, 1987 | 15 Culver Street | John H. McNeil and L M McNeill | Residence |
| 1992 | 15 Culver Street | Lillie M. McNeill | Residence |
| 1999 | 13 Culver Street | Occupant Unknown | Residence |
| 1999 | 15 Culver Street | Elvis Derios<br>Maribel Rios | Residence |
| 2003 | 15 Culver Street | Elvis Derios<br>Floyd Freeman | Residence |
| 2008, 2013 | 13 Culver Street | Floyd Freeman | Residence |
| 1972 | 372 Riverdale Avenue | Thomas J Scollan | Unknown |
| 1977, 1982, 1987 | 372 Culver Street | Goodyear Tire | Automotive repair shop and tire sales. |
| 1992 | 372 Riverdale Avenue | Goodyear Tire & Rubber Co. / The Auto Service Center of Yonkers | Automotive repair shop and tire sales. |
| 2003 | 372 Riverdale Avenue | Occupant Unknown | Unknown |
| 1999, 2008, 2013 | 372 Riverdale Avenue | Goodyear Auto Service Center | Automotive repair shop and tire sales. |

A copy of the City Directory Abstract is included in Appendix G.

## 3.8 Previous Investigations/Assessments

At the time this report was prepared, no knowledge or documentation regarding previous environmental investigations, assessments, and/or remedial activities performed at the Site were identified by Ransom.

## 4.0 SITE RECONNAISSANCE

On May 9, 2017, Erin R. Pente, Senior Environmental Scientist of Ransom, and Lauren Rojewski, Environmental Scientist of Ransom, conducted a general site reconnaissance. The Site visit included a visual reconnaissance of the property grounds and interior portions of the Lot 30 Site Building for the identification of HSP, evidence of releases, and/or potential releases of HSP. Mr. Daniel Romano, the property owner, provided Ransom with access to the Lot 30 Site Building. Access to the Residential Building on-Site was limited to the basement due to safety concerns. Additionally, entry through the north side of the Residential Building was restricted due to the welding shut of two doors. A photographic log is included in Appendix D.

### 4.1 Current Uses and Activities

The Lot 30 Site Building is currently occupied by a retail car sales company identified as West Coast Auto Sales, which has occupied the Lot 30 portion of the Site since the summer of 2016. The service garage and adjoining storage area within the Lot 30 Site Building, as well as the surrounding paved areas, are currently utilized for the storage of vehicles. Goodyear vacated the Site and discontinued automotive service operations and tire sales sometime in 2015. The Residential Building located on the Lot 26 portion of the Site is unoccupied, and according to Mr. Daniel Romano, not suitable for occupancy and has been vacant since sometime in 2009. The remainder of the Lot 26 portion of the Site is currently being utilized as vehicle storage by a neighboring property owner.

### 4.2 Hazardous Materials/Petroleum Storage and Handling

No automotive service operations are currently conducted at the Site. Ransom observed three 55-gallon steel drums containing waste oil within the service garage of the Lot 30 Site Building. The drums were observed to be in good condition with no visible staining on or around the drums; however, visible oil was observed on the drum lids. Various cleaning solvents and motor oil storage containers were observed throughout the Lot 30 Site Building; however, no leaks from these stored materials were observed.

Ransom observed Site-wide solid waste including, but not limited to, gasoline cans, paints cans, propane tanks, cleaning solvents, tires, etc. Additionally, a chest freezer and other former appliances, which may potentially contain ozone depleting substances (ODS), was observed as being stored on the exterior portion of the Residential property. Most of the solid waste item were in good to poor condition; however no visible staining or leaks was observed on or around the materials or storage containers.

### 4.3 Waste Generation, Treatment, Storage, and Disposal

No waste is currently generated at the Site, with the exception of municipal solid wastes and recyclable materials, which are stored with separate dumpsters on the Lot 30 portion of the Site. The dumpsters were observed in good condition and no visible staining or leaks was observed on or around the dumpsters. The removal and proper disposal of these materials are the current responsibility of the tenant, West Coast Autos.

Former automotive repair operations on-Site utilized one 550-gallon waste oil UST, historically located on the southeastern exterior of the Lot 30 Site Building. The waste oil UST was presumptively removed from the Site sometime in 1995, at which time it is presumed that 55-gallon drums were utilized for the storage of waste oil until sometime in 2015. Three 55-gallon drums containing waste oil are still present within the service garage area of the Lot 30 Site Building that require proper disposal. The drums were

observed to be in good condition with no visible staining on or around the drums; however, visible oil was observed on the drum lids.

Approximately six circular stains, indicative of staining related to former drum storage (presumably for waste oil), were observed between Bay 6 and Bay 7 within the Lot 30 Site Building. The concrete in the vicinity of the drums was observed with a large crack; however, no evidence of floor drains was observed in the vicinity of the staining. The presence of this staining represents evidence of historical drum storage and waste generation, which presumably was how waste oil was stored after the waste oil UST was removed in 1995 until 2015, when automobile repair operations ceased.

Two five-gallon buckets, with no lids and partially filled with what appeared to be used cooking oil, were observed on the residential portion of the property. The area around the buckets was overgrown, so observation below the buckets was not feasible.

### 4.4 Polychlorinated Biphenyls

A total of seven of the eight automotive repair bays housed underground hydraulic lifts, and one bay housed an air/hydraulic alignment rack. Two single-piston underground hydraulic lifts were observed within Bay 2 and Bay 5 of the service garage area of the Lot 30 Site Building. Additionally, five double-piston underground hydraulic lifts were observed in Bay 1, Bay 3, Bay 4, Bay 6, and Bay 8 of the service garage and one hydraulic alignment rack was observed within Bay 7 of the service garage. A total of seven underground hydraulic lifts were observed within the service garage area of the Lot 30 Site Building. Five hydraulic reservoirs were observed mounted along the walls within the service garage area as well. Three floor-mounted hydraulic lift control boxes were observed within the service garage area of the Lot 30 Site Building. The concrete around the lifts appears to not be original and it was observed that the date "2006" was carved into the concrete, indicating that the hydraulic lift system upgrades may have taken place circa 2006. Several fluorescent light fixtures were observed throughout the interior of the Lot 30 Site Building as well.

Although not observed within the Site Building, the historic construction plans reviewed at the City of Yonkers Housing and Building Department identified that five of the seven hydraulic lifts potentially had historical underground hydraulic oil reservoirs, which were upgraded to wall-mounted hydraulic underground lifts as noted above. Two former air compressors and associated air filter were depicted as being located within the storage area of the Lot 30 Site Building and were connected (via underground piping) to the three floor-mounted control boxes for the former hydraulic lift operations. Details on each component if the identified current and former systems components that represent RECs are as follows:

- **Hydraulic Lifts and Alignment Rack**: The current underground hydraulic lift system, presumably an upgrade to the former hydraulic lift system circa 2006, and that was apparently not being utilized by the current property owner, includes a total of seven underground hydraulic lifts, five wall-mounted hydraulic fluid reservoirs/control boxes, three floor-mounted control boxes (where the control box between Bays 3 and 4 was presumably disconnected) and two electric air compressors that were observed during site reconnaissance activities within the service garage area of the Lot 30 Site Building. One hydraulic alignment rack was also observed within Bay 7; however, its age is unknown. Two single-piston hydraulic lifts were observed within Bay 2 and Bay 5, and five double-piston underground hydraulic lifts were observed within Bay 1, Bay 3, Bay 4, Bay 6, and Bay 8 of the service garage area of the Lot 30 Site Building during Site reconnaissance activities. Based on historical plans, the single-piston lifts were installed to approximately 8.5 feet below floor grade and the double-piston lifts were installed to

approximately 8 feet below floor grade. The hydraulic lift areas were observed to be in good condition; however, three vehicles were parked directly over the lifts within Bay 2, Bay 3, and Bay 6. Based on the former operations and unknown condition of the subsurface in the vicinity of the hydraulic lifts, there is a potential for residual soil impacts from in these areas. Further investigation is warranted.

- **Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes**: A total of five wall-mounted hydraulic fluid reservoirs were observed along the perimeter of the service garage area. The hydraulic fluid reservoirs were observed to be in good condition with minimal staining on the concrete surface beneath them. These reservoirs were presumably installed sometime in or around 2006, following the removal of the former underground hydraulic lift tanks. Residual hydraulic fluid was observed within the reservoirs. Piping emanating from the reservoirs to below the building slab was unobservable during Site reconnaissance activities; therefore, the condition of these areas is unknown. Based on the former operations and unknown condition of the subsurface in the vicinity of the hydraulic fluid reservoirs, there is a potential for residual soil impacts in these areas. Further investigation is warranted.

- **Former Hydraulic Lifts, Air/Hydraulic Alignment Rack and Underground Hydraulic Oil Reservoirs**: According to the original construction plans of the Lot 30 Site Building provided by the City of Yonkers Housing and Building Department, the Lot 30 Site Building had seven underground hydraulic lifts and one air/hydraulic alignment rack. The former lift system utilized approximately five underground hydraulic oil reservoirs, two air compressors with an associated air filter, and three floor-mounted control boxes; however, the status of the formerly used underground reservoirs is unknown. These hydraulic lifts and associated reservoirs were installed circa 1974 when the Lot 30 Site Building was erected, and were taken out of use circa 2006, when the current hydraulic lifts and wall-mounted hydraulic oil reservoirs were installed. The specific details of the upgrades to the system are unknown; however, it is presumed that the number of pistons, underground housing, and location of the lifts were the same as present day. Based on historical plans, the single-piston lifts were installed to approximately 8.5 feet below floor grade and the double-piston lifts were installed to approximately 8 feet below floor grade. The underground hydraulic oil reservoirs were unobservable during Site reconnaissance activities. Further, information regarding their removal was not identified by, or provided to, Ransom, and the condition of these underground areas is unknown.

- **Hydraulic Lift Control Boxes**: A total of three floor-mounted control boxes were observed throughout the service garage area; one between Bay 1 and 2, one between Bay 3 and 4, and one between Bay 5 and 6. The control box between Bays 3 and 4 was presumably disconnected since both associated lifts had wall-mounted hydraulic fluid reservoirs/control boxes. The control boxes were observed to be in good condition with visible staining on the concrete surface beneath them. These control boxes were presumably installed circa 1974, when the Lot 30 Site Building was erected. The presence of the boxes restricted observation to conditions below the box itself; therefore, the subsurface conditions below the control boxes are unknown.

- **Former Air Compressors**: Two former air compressors and one associated air filter were identified on construction plans identified from the City of Yonkers Housing and Building Department. The former air compressors and filter were located within the storage area of the Lot 30 Site Building and were connected (via underground piping) to the three floor-mounted control boxes for the former hydraulic lift operations. These compressors were installed circa

1974 when the Lot 30 Site Building was erected, and were taken out of use circa 2006, when presumably the two electric air compressors were installed. The out-of-use air filter was observed during the Site reconnaissance. No evidence of former discharge locations were observed during Site reconnaissance activities, and the floor where these air compressor were formerly stored was unobservable due to the presence of parked vehicles.

### 4.5 Asbestos-Containing Building Materials

Based upon the construction date of the Lot 30 Site Building and Residential Building, 1974 and 1900, respectively, asbestos-containing building materials (ACM) may be present within the Lot 30 Site Building and Residential Building. Additionally, a substance indicative of asbestos joint compound was observed along piping within the boiler room of the Site Lot 30 Building.

### 4.6 Lead Paint

Lead based paint was banned for residential use in the United States in 1978, by the U.S. Consumer Product Safety Commission (16 CFR 1303). Based on the construction date of the Lot 30 Site Building (1974) and the Residential Building (1900), it is possible that lead-based paints (LBPs) are present in the Lot 30 Site Building and/or the Residential Building.

### 4.7 Mercury

During Ransom's interior reconnaissance of the Lot 30 Site Building and interior reconnaissance of the basement of the Residential Building, fluorescent bulbs were observed that may contain mercury vapor.

### 4.8 Storage Tanks (above or below ground) and Piping

#### 4.8.1 Aboveground Storage Tanks

No aboveground storage tanks (ASTs) were observed during Site reconnaissance activities.

#### 4.8.2 Underground Storage Tanks

Ransom did not observe any evidence of the presence of current/active USTs during Site reconnaissance activities. However, based on a review of records identified at the City of Yonkers Housing and Building Department, the following former USTs were identified:

- **Former 3,000-gallon Fuel Oil UST**: One 3,000-gallon fuel oil UST was presumably removed from the Site in August 1995 according to permitting documentation identified at the City of Yonkers Housing and Building Department. The former fuel oil UST was located on the eastern exterior of the Lot 30 Site Building. This UST was presumably installed during the initial construction activities sometime in 1974. Permitting documentation indicated that UST removal activities were completed by September 1995; however, documents reviewed did not reference UST content or capacities. Based on known information, the UST referenced within the permitting documentation is presumed to be the former 3,000-gallon fuel oil UST; however, detailed UST removal documentation was not identified by Ransom.

- **Former 550-gallon Waste Oil UST**: One 550-gallon waste oil UST, historically utilized in relation to former automotive service activities, was presumably removed from the Site in August

1995 according to permitting documentation identified at the City of Yonkers Housing and Building Department. This UST was presumably installed during the initial construction activities sometime in 1974. Permitting documentation indicated that UST removal activities were completed by September 1995; however, documents reviewed did not reference UST content or capacities. Based on known information, the UST referenced within the permitting documentation is presumed to be the former 550-gallon waste oil UST; however, detailed UST removal documentation was not identified by Ransom.

## 4.9 Surface Conditions

### 4.9.1 Drains

A total of four sealed floor drains and four active floor drains were observed in the Lot 30 Site Building during reconnaissance activities. Sealed floor drains were observed in the following locations throughout the Lot 30 Site Building; southwest portion of the service garage, parts storage room within the service garage, southwest portion of the boiler room, and within the former employee locker room. Active floor drains were observed in the following locations throughout the Lot 30 Site Building; the western most restroom, the eastern most restroom, the utility sink within the service garage, and within the existing storage area. Additionally, one clean out pipe was observed in the southwest portion of the service garage of the Lot 30 Site Building. Although not observed within the Site Building, the historic construction plans identified at the City of Yonkers Housing and Building Department reviewed during the site reconnaissance also depicted seven former floor drains, one near each hydraulic lift, one former/inactive 4-inch cast iron drainage pipe for the former hydraulic lift floor drains, and one active 6-inch drainage pipe for the drains along the northern portion of the Lot 30 Site Building. The former/inactive 4-inch cast iron drainage pipe was depicted as leading to a grease and sand interceptor. The Lot 30 Site Building's drainage system reportedly discharged and/or currently discharges to the municipal sanitary sewer system. No staining or evidence of a release was observed at the drains. Due to the inaccessibility of the Residential Building, floor drain locations were not noted during Site reconnaissance activities. Details on the Lot 30 Site Building floor drains and interceptor are as follows:

- **Service Garage Sealed Floor Drain**: One sealed floor drain was identified in the vicinity of the Bay 8 hydraulic lift and the eastern most hydraulic fluid reservoir, which reportedly connected to the former/inactive 4-inch cast iron drainage pipe. No staining or evidence of impact was noted during site reconnaissance activities surrounding the floor drain; however, the condition of the underground drainage system that led to the municipal sanitary sewer line is unknown. Due to the close proximity of the floor drain to the former automotive repair activities, there is a potential for residual soil and/or groundwater impacts from this area. Further investigation is warranted.

- **Boiler Room Sealed Floor Drain**: One sealed/debris filled floor drain was identified within the boiler room of the Lot 30 Site Building, which reportedly connected to the 6-inch cast iron drainage pipe. Although this floor drain is currently sealed, historic use of the fuel oil fired boiler and observed staining on the exterior of the boiler (REC 4), and since the condition of the underground drainage system that led to the municipal sanitary sewer line is unknown, there is a potential for residual soil and/or groundwater impacts in this area. Further investigation is warranted.

- **Parts Room Sealed Floor Drain**: One sealed floor drain was identified within the parts room of the Lot 30 Site Building, which reportedly connected to the 6-inch cast iron drainage pipe. No

staining or evidence of impact was observed in the vicinity of this drain; however, the condition of the underground drainage system that led to the municipal sanitary sewer line is unknown.

- **Bathroom Floor Drains**: Two active floor drains were identified in each bathroom area just north of the eight service bays, which reportedly connect to the 6-inch cast iron drainage pipe. No staining or evidence of impact was noted during site reconnaissance activities; however, the condition of the underground drainage system that leads to the municipal sanitary sewer line is unknown.

- **Employee Locker Room Sealed Floor Drain**: One sealed floor drain was identified in the former employee locker room just north of the eight service bays, which reportedly connected to the 6-inch cast iron drainage pipe. No staining or evidence of impact was noted during site reconnaissance activities; however, the condition of the underground drainage system that led to the municipal sanitary sewer line is unknown.

- **Tire Wash Area Floor Drain**: One floor drain was identified in the curb utility sink just north of the eight service bays that was previously utilized as a former tire wash area, and which reportedly connects to the 6-inch cast iron drainage pipe. No staining or evidence of impact was noted during site reconnaissance activities; however, the condition of the underground drainage system that leads to the municipal sanitary sewer line is unknown.

- **Former Hydraulic Lift Floor Drains**: Seven former floor drains, which reportedly connected to a former/inactive 4-inch cast iron drainage pipe were identified on historic construction plans identified at the City of Yonkers Housing and Building Department. Former floor drains were located beneath the original hydraulic lifts within Bay 1, Bay 2, Bay 3, Bay 4, Bay 5, Bay 6, and Bay 8 of the service garage. The former/inactive 4-inch cast iron drainage pipe was identified leading from the former hydraulic lift floor drains to a former/inactive grease and sand interceptor (REC 1G). Site redevelopment activities were presumably completed sometime in or around 2006; however, Ransom did not obtain information that confirms the floor drains, drainage pipe, and grease and sand interceptor were removed or properly abandoned in-place. Further, the condition of the underground drainage system that led to the municipal sanitary sewer line is unknown.

- **Former Grease and Sand Interceptor**: A former underground grease and sand interceptor was identified on historic construction plans identified from the City of Yonkers Housing and Building Department. The former underground grease and sand interceptor was located in the western portion of the service garage area of the Lot 30 Site Building that received overflow/waste from the Lot 30 Site Building's hydraulic lift areas. As the former grease and sand interceptor was not observed during the Site reconnaissance, Ransom was unable to inspect this area.

## 4.10 Other Conditions of Concern

### 4.10.1 Inactive Boiler

One inactive oil fired boiler was observed within the boiler room of the Lot 30 Site Building. The oil-fired burner, which was situated on a concrete slab, was observed to be in poor condition with heavy rusting visible on the exterior of the boiler. Ransom was unable to inspect the area beneath the oil-fired

burner during Site reconnaissance activities. Waste ash, which may contain heavy metals, was observed within the base of the boiler.

### 4.10.2 Air Compressors

Two stationary electric air compressors were observed within the Lot 30 Site Building during site reconnaissance activities mounted and staged on a wood platform. The air compressors were 80-gallon capacity with a one-piece cast iron crankcase for lubrication oil and an oil-lubricated pump with three cast iron cylinders. The compressors were observed to be in good condition with no evidence of staining on or around the units and the concrete floor below the units was observed intact with no cracks or staining.

## 5.0 REGULATORY FILE SEARCH

As part of Ransom's assessment of the Site, EDR conducted an environmental database search. The search included reviews of federal and state database records and was conducted in general accordance with the specific requirements of ASTM International E 1527-13. A listing of the search radii for each environmental database searched is included in the EDR Report. A copy of the EDR Report is provided in Appendix E. The table below summarizes the regulatory database findings within ¼-mile of the Site, where sites between ¼-mile and 1-mile are not anticipated to impact the Site. Based on local topography, groundwater at the Site is anticipated to flow to the north-northwest, toward the Hudson River. Therefore, properties located to the south-southeast are anticipated to be hydrologically upgradient from the Site.

| EDR Site ID(s) | Property Location | Direction/ Distance from Site | Database | Site Impact | Rationale |
|---|---|---|---|---|---|
| A1, A2 | Goodyear Auto Service Center<br>372 Riverdale Avenue, Yonkers NY | Target Property | RCRA-CESQ, FINDS, ECHO, NY MANIFEST, RI Manifest, EDR Hist Auto | Not Anticipated | No violations or Spill Numbers were identified in association with the Site. See below. |
| A3, A7, A8 | Citgo Service Station / 380 Riverdale Avenue Inc.<br>380 Riverdale Avenue, Yonkers NY | Southwest 48-feet | NY Spills, NY UST, EDR Historic Auto | Potential | Identified on list of NY Spills. See below. |
| A4, A5 | ConEdison Trench 1111<br>Intersection of Riverdale Avenue and Culver Street, Yonkers NY | West-southwest 63-feet | RCRA-LQG, NJ Manifest, NY Manifest | Not Anticipated | No violates were identified in association with this listing. See below. |
| A6 | Lewis Property<br>10 Culver Street, Yonkers NY | South-southeast 91-feet | NY Spills | Not Anticipated | NY Spills No. is listed as closed/inactive. See below. |
| B9 | 377 Riverdale Avenue, Yonkers NY | West 47-feet | EDR Hist Auto | Potential | No violations or Spill Numbers were identified in association with the Site. See below. |
| D14, D15, D16, D17, D18 | Devonshire 2010 Inc. / Devonshire Tire / Devonshire Lane Service<br>390 Riverdale Avenue, Yonkers NY | South 244-feet | NY UST, NY AST EDR Hist Auto, NY Spills, RCRA NonGen/NLR, FINDS, ECHO | Potential | Identified on list of NY Spills. See below. |
| E23 | Rosario Residence<br>15 Cliff Avenue, Yonkers NY | East 98-feet | NY Spills | Not Anticipated | NYSDEC determined that no further action was required. See below. |

5.1 Goodyear Auto Service Center (A1, A2)

The Site was listed on several databases identified during the EDR search. The Site was listed on the RCRA-CESQ database as the Goodyear Auto Service Center and was listed as a conditionally exempt small quantity generator/handler of hazardous waste. No violations were associated with this database listing. Additionally, the Site was listed on the EDR database of Historical Auto Stations as the Goodyear Auto Service Center for the years 1999, 2000, 2002, 2009, 2010, and 2012.

5.2 Citgo Service Station (A3, A7, A8)

The property located at 380 Riverdale Avenue was identified as a Citgo-branded gasoline filling station was identified on the NYSDEC database of documented spills (NY Spills) as Site ID No. 371999 and listed as active. Listings for the Citgo Service station included the following:

- Spill No. 0608110 was issued on October 16, 2006 for a known release of petroleum products, initially identified during soil sampling activities. This spill incident is listed as active on the NYSDEC Spill Incidents Database.

- Spill No. 0202712 was issued on June 13, 2002 for a release of gasoline identified during tank testing activities. This spill incident is listed as active on the NYSDEC Spill Incidents Database.

- Spill No. 110501 was issued on February 1, 2002 for a release of transmission fluid to a drain located on the property. No records were available through the NYSDEC Spill Incidents database for this incident.

- NY UST Facility ID No. 3-800744 is an active facility with two 6,000-gallon gasoline USTs (Tank 001 and 002) and one 6,000-gallon diesel UST (Tank 0003), installed on July 1, 2003. Historically, this property operated with two 6,000-gallon gasoline USTs (Tank 1 and Tank 2) and one 6,000-gallon diesel UST (Tank 3), originally installed on July 1, 1973.

- EDR Historical Auto Stations identify potential automotive facilities based on historical operator names. The Citgo service station was identified at this address in 2011 and 2012.

Based on the identified spill numbers and close proximity to the Site, Ransom concludes that this facility has the potential to have impacted the Site.

5.3 ConEdison Trench 1111 (A4, A5)

A property located at the intersection of Riverdale Avenue and Culver Street was identified on the EDR list of RCRA-LQG and NJ Manifest sites, this property was identified as a large quantity generator of hazardous wastes. This property is currently maintained by ConEdison and no violations were reported in connection with this property.

5.4 Lewis Property (A6)

The Lewis Property, located at 10 Culver Street, Yonkers NY, was identified on the NY Spills database. Spill No. 193717 was reported for the release of approximately 2-gallons of fuel oil (No. 2), originating from a leak in the fill pipe, on May 15, 1991. This Spill No. is listed as inactive and due to the *de minimis*

nature of the release, this case is not expected to impact the environmental conditions of the Site and no further investigation is recommended.

5.5 377 Riverdale Avenue (B9)

The property located at 377 Riverdale Avenue (presently known as 373 Riverdale Avenue) was identified on the EDR list of Historic Auto Stations as the Riverdale Auto Service Center Inc. for the years 2011 and 2012. No further information was provided. Due to the sidegradient location of this property, its former proximity to the Site, and its depicted service station use from at least 1940 to 1978, further investigation is warranted.

5.6 Devonshire 2010 Inc. (D14, D15, D16, D17, D18)

This property located at 390 Riverdale Avenue, identified as Devonshire 2010 Inc., and the present-day location for the Devonshire Discount Tire, Auto Body & Repair Center, was identified on several EDR listings. Based on the statuses of the EDR listings for this facility and its sidegradient location relative to the Site, no further investigation is recommended. Listings for the Devonshire facility included the following:

- NY UST Facility ID No. 3-138045 is an inactive UST facility. Three 6,000-gallon gasoline USTs and one 1,000-gallon UST of unknown contents are listed as closed and abandoned in-place.

- New York AST Facility ID No. 3-138045 is an active facility which currently utilizes one 1,000-gallon #2 fuel oil AST, two 275-gallon waste oil AST. Two 275-gallon ASTs of unknown contents were removed from this property on January 1, 2006.

- EDR Historical Auto Stations identify potential automotive facilities based on historical operator names. One Transmission Parts Inc. was identified at this address in 2007. The Firestone Tire & Auto Service Center was listed at this address in 2008. The Riverdale Transmission Parts Inc. was listed at this address for 2009. The Firestone Devonshire Tire Company was listed at this address in 2010 and the Devonshire Tire Co. for the year 2011.

- NY Spills No. 1007244 was issued for the discovery of a release of fuel oil (No. 2) to soils during the removal of one 1,000-gallon UST in January of 2011. A total of 715.89 tons of petroleum impacted soils were removed from this property at this time. A closure status was issued in relation to this spill incident on January 26, 2011.

- This property was identified on the RCRA NonGen/NLR, FINDS, and ECHO databases as a non-generator, handler of hazardous waste. No violations were identified in relation to the handling of hazardous materials on the aforementioned databases.

Based on the identified spill numbers and close proximity to the Site, Ransom concludes that this facility has the potential to have impacted the Site.

5.7 Rosario Residence – 15 Cliff Avenue (E23)

The property located at 15 Cliff Avenue was identified on the NY Spills Database as Facility ID No. 509913. NY Spills No. 1503602 dated August 17, 2015 was issued to this property in response to a known release of #2 fuel oil originating from a 1,000-gallon heating oil AST during removal activities.

The NYSDEC concluded that due to the limited nature of the release and subsequent clean-up activities, that no further action was warranted.

## 5.8 Orphan Sites

An Orphan Site is a listed site in the same zip code as the subject Site which cannot be mapped because of inadequate address information. Ransom reviewed the four Orphan Sites and determined that they are located in positions considered to be cross-gradient, downgradient, or hydrologically isolated from the Site, or are beyond the applicable ASTM search parameters. Therefore, it is unlikely that these Orphan Sites will adversely impact environmental conditions at the Site.

## 6.0 ADJACENT PROPERTIES

The Site is adjoined by the following properties:

- To the north, the Site is bordered by residential properties, including the 362 Riverdale Avenue, 76 Post Road, 80 Post Road, 82 Post Road, and 84 Post Road. Further to the north are more residential properties and mixed use commercial-residential areas.

- To the south of the Site, across Culver Street, is the Citgo-branded gasoline filling station located at 380 Riverdale Avenue. Additionally, residential properties are located to the south of the Site, across Culver Street, and are located at 10, 12, 14, 16, 18, 20, and 22 Culver Street. Further south of the Citgo-branded gasoline filling station is the Devonshire Discount Tire, Auto Body & Repair Center.

- To the east of the Site is the Culver Park, a City of Yonkers operated park and playground area. Culver Park is located at the intersection of Culver Street and Livingston Avenue.

- To the west of the Site, across Riverdale Avenue, is the PEARLS Hawthorne School, located at 350 Hawthorne Avenue.

The southern adjacent Citgo-branded gasoline filling station and Devonshire Discount Tire, Auto Body & Repair Center represent potential environmental concerns due to their proximity to the Site and their historical release cases.

## 7.0 VAPOR INTRUSION ASSESSMENT

Ransom has identified potential releases of volatile contaminants on the Site. Ransom has also identified historic potential or known releases of volatile contaminants from off-site properties immediately adjacent and upgradient of the Site. Therefore, Ransom recommends performance of a Vapor Intrusion Evaluation and Assessment as part of a Phase II limited subsurface investigation. If the results of that assessment indicate that a potential vapor intrusion risk exists, Ransom will perform a Vapor Intrusion Risk Analysis, which will present alternatives for mitigation of the risk, if warranted.

## 8.0 DATA GAPS

At the time this report was prepared, several information requests remain outstanding, including the City of Yonkers Fire Department, the United States Army Corp of Engineers and NYSDEC requests. However, upon receipt and review, pertinent information provided by the above-mentioned agencies will be forwarded in an addendum to this report. This data gap represents an environmental concern warranting additional investigation to assess RECs in connection with the Site.

## 9.0 CONCLUSIONS AND RECOMMENDATIONS

### 9.1 Conclusions

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM International E 1527-13 and the Corporate Services Agreement, for the Site identified by the City of Yonkers Assessor's Tax Map Section 1, Block 129, Lots 26 and 30. Any exceptions to, or deletions from, this practice are described in Section 1.2 of this report. Based on the information identified during this ESA, Ransom has identified the following RECs in connection with the Site:

- **REC 1 – Automotive Repair Drainage System**: A total of 11 sealed/inactive/former floor drains, four active floor drains, one former/inactive 4-inch cast iron drainage pipe, and one active 6-inch drainage pipe were either observed or identified throughout the Lot 30 Site Building. The former/inactive 4-inch cast iron drainage pipe was depicted as leading to a grease and sand interceptor. The Lot 30 Site Building's drainage system reportedly discharged and/or currently discharges to the municipal sanitary sewer system. The identified floor and appurtenant drainage pipes, and former grease and sand interceptor, represent RECs as follows (details are presented within Section 4.9.1 of this Report):
    - REC 1A – Service Garage Sealed Floor Drain;
    - REC 1B – Boiler Room Sealed Floor Drain;
    - REC 1C – Parts Room Sealed Floor Drain;
    - REC 1D – Bathroom Floor Drains;
    - REC 1E – Employee Locker Room Sealed Floor Drain;
    - REC 1F – Tire Wash Area Floor Drain;
    - REC 1G – Former Hydraulic Lift Floor Drains; and
    - REC 1H – Former Grease and Sand Interceptor.

  Due to the close proximity of the sealed/inactive/former floor drains and former underground grease and sand interceptor to the former automobile repair activities, there is a potential for soil and/or groundwater impacts within this area. Further investigation is warranted.

- **REC 2 – Automotive Repair Hydraulic Lift Systems**: A total of seven of the eight automobile repair bays housed underground hydraulic lifts, and one bay housed an air/hydraulic alignment rack. It is believed that at least five of the seven hydraulic lifts historically had underground hydraulic oil reservoirs, which were upgraded to wall-mounted hydraulic underground lifts. Two former air compressors and associated air filter were located within the storage area of the Lot 30 Site Building and were connected (via underground piping) to the three floor-mounted control boxes for the former hydraulic lift operations. The identified current and former system components represent RECs as follows (details are presented within Section 4.4 of this Report):
    - REC 2A – Hydraulic Lifts and Alignment Rack;
    - REC 2B – Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes;
    - REC 2C – Former Hydraulic Lifts, Air/Hydraulic Alignment Rack and Underground Hydraulic Oil Reservoirs;

- REC 2D – Hydraulic Lift Control Boxes; and
- REC 2E – Former Air Compressors.

Based on the former operations and unknown condition of the subsurface in the vicinity of the current/former hydraulic lifts/alignment rack, wall-mounted hydraulic fluid reservoirs, underground hydraulic oil reservoirs, hydraulic lift control boxes, and former air compressors, there is a potential for soil impacts within these areas. Further investigation is warranted

- **REC 3 – Vehicle Storage**: Used vehicle storage was observed within the northeastern most storage area of the Lot 30 Site Building, as well as throughout the paved parking areas surrounding the Lot 30 Site Building. The areas beneath the parked vehicle was inaccessible during Site reconnaissance activities; therefore, Ransom was unable to ascertain the integrity of the surface materials in these areas. Further investigation is warranted in all vehicle storage areas throughout the Site.

- **REC 4 – Inactive Oil-Fired Boiler System**: One inactive oil-fired burner was observed in the boiler room of the Lot 30 Site Building. The oil-fired burner was observed to be in poor condition with heavy rusting and staining visible on the exterior of the boiler. Due to the presence of dust and dim lighting, the condition of the floor below the boiler could not be fully assessed. Additionally, waste ash, which may contain heavy metals, was observed within the base of the boiler. Due to the poor condition of the oil-fired burner, close proximity to a former floor drain, inability to access the area beneath the oil-fired burner, and presence of waste ash, there is a potential for residual soil impacts in this area. Further investigation into the soil conditions in this area is warranted.

- **REC 5 – Former 3,000-gallon Fuel Oil UST**: One former 3,000-gallon fuel oil UST was identified on historic construction plans on the eastern exterior side of the Lot 30 Site Building. An associated pump was identified on the eastern most portion of the storage area within the Lot 30 Site Building as well. The fuel oil UST depicted on the historical plan was connected to a pump and subsequently to the oil-fired boiler (REC 4) via underground piping. A certificate of completion was issued by the City of Yonkers Bureau of Housing and Buildings on September 19, 1995 for "removed underground oil tanks," presumably indicating the removal of the 3,000-gallon fuel oil UST. However, due to the vague nature of the certificate of completion and lack of additional documentation for the closure activities, further investigation is warranted regarding this REC.

- **REC 6 – Former 550-gallon Waste Oil UST**: One former 550-gallon waste oil UST was identified on historic construction plans on the southeastern exterior or of the Lot 30 Site Building. A certificate of completion was issued by the City of Yonkers Bureau of Housing and Buildings on September 19, 1995 for "removed underground oil tanks," presumably indicating the removal of the 550-gallon waste oil UST. However, due to the vague nature of the certificate of completion and lack of additional documentation for the closure activities, further investigation is warranted regarding this REC.

- **REC 7 – 55-Gallon Waste Oil Drum Storage**: Approximately six circular stains, indicative of former drum storage (presumably for waste oil), were observed between Bay 6 and Bay 7 within the Lot 30 Site Building. The concrete in the vicinity of the drums was observed with a large crack; however, no evidence of floor drains was observed in the vicinity of the staining. The

presence of this staining represents evidence of historical drum storage and waste generation, which presumably was how waste oil was stored after the waste oil UST was removed in 1995 until 2015, when automobile repair operations ceased. Due to the observed crack in the concrete and the evidence of staining in this area, further investigation of the soil conditions in this area is warranted.

Additionally, Ransom observed three 55-gallon steel drums containing waste oil within the service garage area of the Lot 30 Site Building, presumably generated by former automobile repair operations. The drums were observed to be in good condition with no visible staining on or around the drums; however, visible oil was observed on the drum lids. No further investigation is recommended in connection with the existing 55-gallon waste oil drums; however, proper removal and off-site disposal is required prior to Site redevelopment.

- **REC 8 – Current/Former Residential Use**: Ransom identified one current and eight former residential buildings associated with the Site. The existing Residential Building is known to use fuel oil for heating. The historical heating source(s) for the former residential structures are unknown. Lastly, private septic systems are also associated with residential use. Therefore, there is a potential for one or more heating oil (No. 2) USTs and/or one or more septic systems to be present on-Site as follows:

    - **REC 8A – Known Fuel Oil Use at the Residential Building**: Property records were identified by Ransom for the Residential Building located on the Lot 26 portion of the Site, which indicated the usage of fuel oil at this property. Ransom was unable to confirm the presence of a fuel oil tank or boiler at the Residential Building; however, a sealed fill pipe was observed on the eastern side of the structure, along the foundation of the Lot 30 Site Building, indicating the potential presence of a fuel oil AST in the basement. Further, two metal doors were observed to be welded shut during site reconnaissance activities of the Residential Building, barring access into a room where a suspect boiler was located.

    - **REC 8B –Former Residential Use**: Historic records and construction plans identified the presence of eight residential structures (not including the current Residential Building) at the Site prior to redevelopment activities in 1974 and 1980. Specific documentation regarding these structures was not identified by, or provide to, Ransom.

  Due to the potential for historic fuel oil usage on the Lot 26 portion of the Site and based on the absence of a known heating source, UST, and/or septic system information for the former residential houses, further investigation is warranted regarding this REC.

- **REC 9 – Potential Fill**: The 1898 Sanborn Map indicted one of the former residential properties with "Low Ground," which indicates that the property had a potential to have been historically filled. The location of this "Low Ground" indication is mostly beneath the present-day Lot 30 Site Building. Based on the unknown source and characteristics of this potential fill material, Ransom believes that the potential exists for off-site fill material to have been brought on-Site; therefore, Ransom recommends that a subsurface investigation be conducted to assess whether historical fill is present on-Site and if it has impacted the environmental conditions at the Site.

- **REC 10 – Potential Off-site Sources**: Ransom identified two current off-site uses where known or potential past discharges of hazardous chemicals from facilities, including a gasoline filling

station and an automotive repair facility, have or may have occurred upgradient of the Site and one off-site use where potential past discharges of hazardous chemicals from facilities, including a former gasoline filling may have occurred sidegradient of the Site. The following potential off-site sources were identified in close proximity to the Site, and represent RECs.

- **REC 10A – Off-Site Citgo Service Station**: The southerly adjacent Citgo-gasoline filling station was identified as an active service station with multiple active NY Spills incident numbers associated with this property.

- **REC 10B – Off-Site Devonshire Discount Tire, Auto Body & Repair Center**: A property located approximately 390 feet to the south of the Site was identified as an active auto body and repair center that has a NY Spills incident with a "Closed" status.

- **REC 10C – Former Riverdale Auto Service Inc.**: The property located 377 Riverdale Avenue, located adjacent (across Riverdale Avenue) to the west and sidegradient of the Site, was identified as a potential off-Site source due to its use as a former gasoline service station from at least 1940 through at least 1978; however, no further information was identified.

Due to the close proximity, NY Spill incident(s) and/or former/current use, Ransom recognizes the potential for off-Site impact to the Site from the current filling station, active auto body and repair center, and former off-site service station operations; therefore, further investigation is warranted.

In addition to the RECs identified above, Ransom identified the following condition of potential environmental concern, which is being documented as a *de minimis* condition as follows:

- **Site-Wide Solid Waste**: Ransom observed Site-wide solid waste including, but not limited to, gasoline cans, paints cans, propane tanks, cleaning solvents, tires, 5-gallon buckets with cooking oil, etc. Additionally, a chest freezer and other former appliances, which may potentially contain ozone depleting substances (ODS), was observed as being stored on the exterior portion of the Residential property.

Some additional environmental concerns were identified which are considered non-scope under ASTM, but were recognized as areas of potential business environmental risk. Specifically, based on the construction date of the Lot 30 Site Building (1974) and the Residential Building (pre-1897), hazardous building materials may be present in the Site Buildings, including asbestos-containing materials (ACM), polychlorinated biphenyls (PCBs) in fluorescent light ballasts, lead-based paint (LBP), and mercury-containing fluorescent lights and/or other equipment. Prior to demolition of the current Site Buildings, identified hazardous building materials should be removed and disposed of in accordance with local, state, and federal regulations.

Based on the information identified during this Phase I ESA, Ransom did not identify any CRECs or HRECs in connection with the Site.

## 9.2 Recommendations

Based on the information identified during this assessment, Ransom concludes that additional investigation is warranted. Ransom makes the following recommendations:

- Based upon the construction date of the Site Building (1974) and Residential Building (pre-1897), hazardous building materials may be present within the Site buildings. Ransom recommends the performance of a comprehensive Hazardous Material Inventory (HMI) survey prior to demolition of the Site Buildings.

- Ransom recommends that sub-slab soil samples be collected along the drainage pipes and on-Site sanitary sewer lines associated with the automotive repair floor drains (REC 1). In an effort to target potential heavily impacted areas, video inspection of the pipes for evidence of cracks or breaches could be conducted as part of the geophysical survey recommended below. Based on the findings of the video inspection, soil sampling could be biased towards those areas of pipe cracks/breaches.

- Ransom recommends the completion of a geophysical survey across the Site in an effort to: (1) confirm the removal of the 3,000-gallon fuel oil UST (REC 5) and 550-gallon waste oil UST (REC 6) presumably removed from the Site in 1995, and (2) assess if one or more historic USTs, former product piping, and/or septic tanks are present from the current/former residential use (REC 8). If anomalies are identified, further subsurface investigation may be warranted.

- A subsurface soil and groundwater investigation is recommended prior to the initiation of construction activities. Ransom recommends the following soil and groundwater monitoring program be completed prior to redevelopment activities:

    - Ransom recommends the collection of sub-slab soil and groundwater samples from beneath the current/former hydraulic lifts and one hydraulic alignment rack (RECs 2A and REC 2C) within the Lot 30 Site Building.

    - Ransom recommends the collection of sub-slab soil samples from beneath the five identified wall-mounted hydraulic fluid reservoirs (REC 2B) within the Lot 30 Site Building immediately adjacent to the exposed subsurface piping.

    - Ransom recommends the collection of sub-slab soil samples immediately adjacent to the three floor-mounted control boxes (REC 2D) within the Lot 30 Site Building.

    - Ransom recommends the collection of subsurface soil and groundwater samples in the locations of the former 3,000-gallon fuel oil UST (REC 5) and 550-gallon waste oil UST (REC 6).

    - Ransom recommends the collection of subsurface soil samples at the location of the crack observed near the former waste oil drum storage/staining (REC 7).

    - Ransom recommends the collection of subsurface soil samples at the location of the potential historical fill area (REC 9).

    - Ransom recommends the installation of temporary groundwater monitoring points and/or soil borings along the southern boundary of the Site to evaluate potential off-Site impacts to the Site (REC 10).

- Since there were physical obstructions (e.g., stored vehicles, dirt, welded doors, etc.), which represent a significant data gap, and based on historical operations, Ransom recommends the

physical obstructions be removed and further inspection completed of the ground surface areas beneath the former air compressor (REC 2E), the stored vehicles (REC 3), the inactive oil-fired burner (REC 4) and potential residential fuel-oil fired boiler (REC 8). Further investigation activities may be warranted based on the findings.

- Ransom recommends the proper disposal of the fuel oil-fired burner and its contents (e.g., waste ash) (REC 8) identified within the Lot 30 Site Building. After removal, Ransom recommends further inspection of the surface areas beneath the fuel oil-fired burner. Further investigation activities may be warranted based on the findings.

- 55-Gallon drums present on-Site should be removed from the Site and properly disposed of prior to Site construction activities, and documentation of their disposal should be maintained with a copy provided to CVS.

- On-Site drainage structures, including potential septic system components and/or storm water drainage structures (catch basins, etc.), that will not be reused as part of the Site redevelopment should be properly decommissioned according to local, state, and federal requirements. If evidence of contamination is identified during decommissioning of these structures, Ransom should be contacted to evaluate whether additional investigation or cleanup is warranted.

- Ransom recommends that miscellaneous chemicals, hazardous materials and/or stored appliances observed at the Site should be recovered/removed from the Site and properly disposed/recycled (by a certified technician where applicable) prior to proposed redevelopment activities.

## 10.0 DECLARATION OF ENVIRONMENTAL PROFESSIONAL

Primary Assessor and Report Author

This Phase I Environmental Site Assessment was conducted in general accordance with the requirements of ASTM International E 1527-13 by the undersigned. Any work completed on this Phase I Environmental Site Assessment by an individual who is not considered an environmental professional was completed under the supervision or responsible charge of the environmental professional(s) listed below.

Lauren Rojewski
Environmental Scientist/Primary Author

Environmental Professionals

We declare that, to the best of our professional knowledge and belief, we meet the definition of an Environmental Professional as defined in §312.10 of 40 CFR Part 312.

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Kimberly A. Skibo
Project Manager/Primary Reviewer

Brian R. Pettingill, P.G.
Senior Project Manager/CVS Program Manager

## 11.0 REFERENCES


1. City of Yonkers
   Ransom FOIL Submission: May 1, 2017
   City of Yonkers Housing and Building File Review: May 9, 2017

2. Westchester County
   Ransom FOIL Submission: May 1, 2017
   Westchester County Department of Health Response: May 10, 2017 and June 7, 2017

3. U.S. Geological Survey, Topographic 7.5–Minute Series Mount Vernon, New York, USGS Quadrangle, 2013.

4. EDR Radius Map with GeoCheck®, produced by Environmental Data Resources, Inc. of Shelton, Connecticut, dated April 29, 2017.

5. Certified Sanborn® Map Report, prepared by EDR, date April 29, 2017.

6. The EDR Aerial Photo Decade Package, prepared by EDR, dated April 29, 2017.

7. The EDR Historical Topographic Map Report, prepared by EDR, dated April 28, 2017.

8. The EDR City Directories, prepared by EDR, dated May 1, 2017.

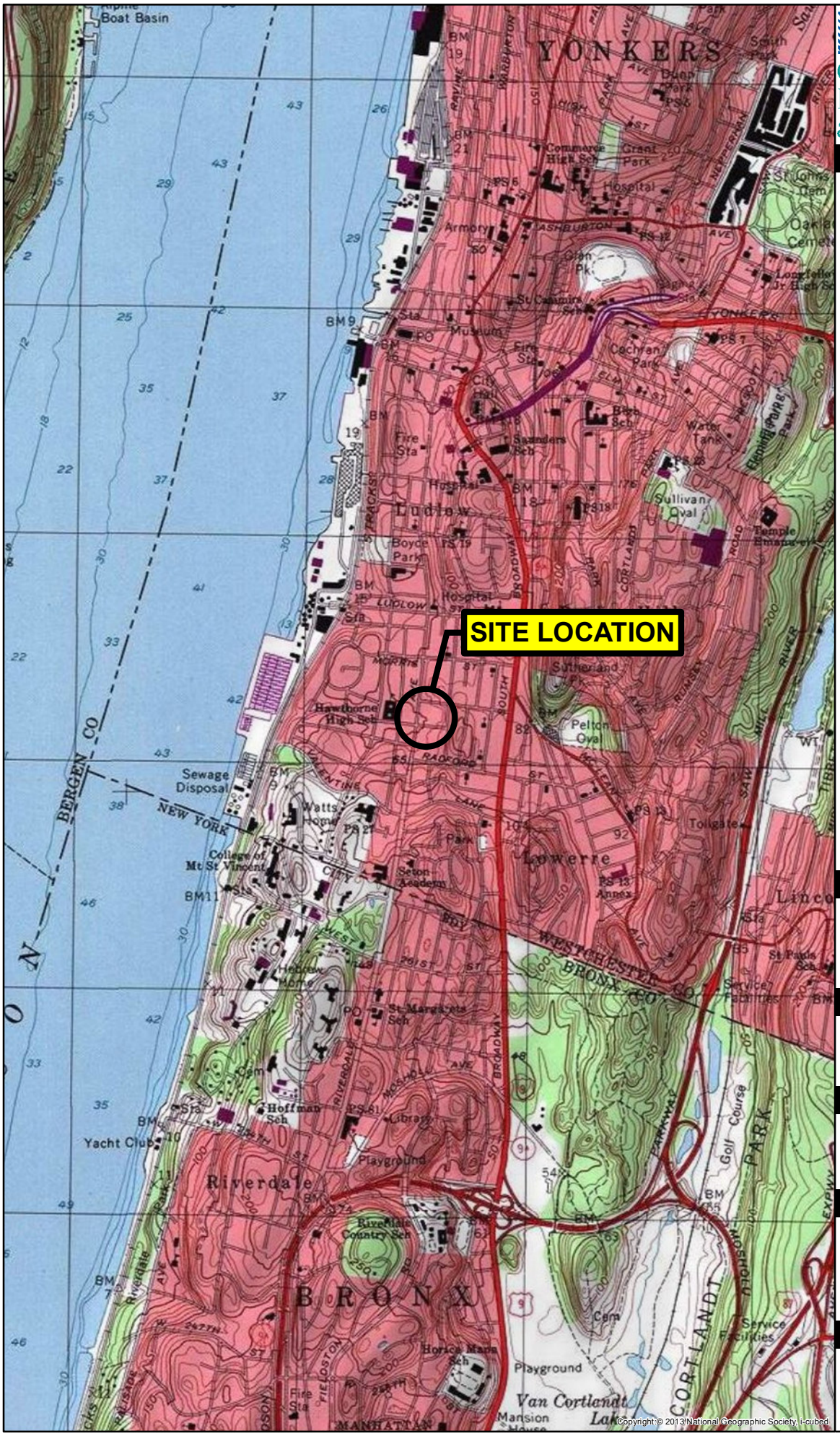
9. United States Army Corps of Engineers (USACE)
   Ransom FOIA Request: May 8, 2017
   USACE Response: May 9, 2017

10. USDA National Resources Conservation Service Web Soil Survey.
    http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

**APPENDIX A**

Site Location Map

Phase I Environmental Site Assessment
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York




RANSOM
Consulting Engineers and Scientists

## Regional Locator Map




Notes

1. Data Source: 2013 National Geographic Society, i-cubed
2. USGS Quad Name: Yonkers, New York
3. Latitude: 40°55'10.7"N
   Longitude: 73°54'02.9"W

## Scale and Orientation

0 1,000 2,000

1 inch = 2,000 feet

## Prepared For

CVS Pharmacy, Inc
One CVS Drive
Woonsocket, Rhode Island

## Prepared For

T.M. Crowley & Associates, Inc.
14 Breakneck Hill Road, Suite 101
Lincoln, Rhode Island 02865

## Site Address

Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

111.02013 | May 2017

# Figure 1

Site Location Map

PM File: CVS_YONKERS_NY-F1_SLM.mxd

**APPENDIX B**

Site Plan

Phase I Environmental Site Assessment
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York




RANSOM
Consulting Engineers and Scientists

## Legend & Notes

- Parcel Boundary
- Overhead Garage Door
- Stormwater Catch Basin
- Stormwater Line
- Former Fuel Oil Piping
- Hydraulic Oil Line
- Active Floor Drain
- Former Floor Drain
- Sealed Floor Drain
- Air Filter
- Hydraulic Lift Control Box
- Hydraulic Fluid Reservoir
- Compressor
- 55-Gallon Waste Oil Storage Drum
- Former 55-Gallon Waste Oil Drum Storage Area
- Hydraulic Lift (Single Post)
- Hydraulic Lift (Double Post)
- Former Residential Structure

Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation
2. Some features are approximate in location and scale
3. This plan has been prepared for CVS Pharmacy, Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

## Scale and Orientation

0 20 40
1 inch = 40 feet

## Prepared For

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island
02895-6146

## Prepared For

T.M. Crowley & Associates, Inc.
14 Breakneck Hill Road, Suite 101
Lincoln, Rhode Island 02865

## Site Address

Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

| 111.02013 | May 2017 |
|---|---|

Figure 2

Site Plan

File: CVS_YONKERS_NY.dwg Date: 05/19/2017

RANSOM Consulting, Inc.

Consulting Engineers and Scientists

August 15, 2017 Ransom Project No. R111.02013

CVS Pharmacy, Inc., its parent, affiliates and subsidiaries and their successors, assigns and grantees
c/o Ms. Shannon Parker
T.M. Crowley & Associates, Inc.
501 Pennsylvania Parkway, Ste. 160
Indianapolis, Indiana 46280

RE: Phase II Limited Subsurface Investigation
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

Dear Ms. Parker:

Ransom Consulting, Inc. (Ransom) is providing this letter to summarize the activities and results of a Phase II Limited Subsurface Investigation (LSI) conducted at the proposed CVS Pharmacy/Store site located at 13 Culver Street and 372 Riverdale Avenue, City of Yonkers, Westchester County, New York (i.e., the "Site"). A Site Location Map and a Site Plan are included as Figures 1 and 2, respectively.

Ransom conducted this Phase II LSI on behalf of T.M. Crowley & Associates Inc. (TMC) and CVS Pharmacy, Inc. (CVS), its parent, affiliates and subsidiaries and their successors, assigns, and grantees, and in accordance with Addendum 1 of an approved CVS Corporate Services Agreement, effective date April 1, 2017. The purpose of this Phase II LSI was to evaluate Recognized Environmental Conditions (RECs) identified in Ransom's Phase I Environmental Site Assessment (ESA) Report, dated June 7, 2017. The objectives of the Phase II LSI were to:

1. Perform a geophysical survey in an attempt to locate evidence of subsurface structures, including possible underground storage tanks (USTs), former UST excavation/backfill areas, product piping, possible septic tank systems, cesspools and/or drywells, and other potential subsurface structures associated with RECs around the current and former Site Buildings;

2. Assess current soil and groundwater conditions at the Site relative to documented or suspected releases of hazardous substances or petroleum products (HSP) at the Site, and in the immediate vicinity of the Site, which were identified as RECs in our June 7, 2017 Phase I ESA; and

3. Evaluate potential impacts to the proposed redevelopment by CVS, including potential risks to Site occupants, construction workers and to the indoor air quality of the proposed CVS building, and increased costs related to managing contaminated soil and/or

groundwater, or potentially implementing vapor mitigation measures during the proposed redevelopment activities, if necessary.

## SITE DESCRIPTION AND BACKGROUND

The Site is located in the northeast corner of the intersection of Riverdale Avenue and Culver Street in the City of Yonkers, Westchester County, New York (i.e., the "Site"), which includes Section 1, Block 129, Lots 26 and 30,. The Site, which totals approximately 1.01 acres, is improved with an approximately 8,695 square-foot commercial structure (the "Lot 30 Site Building") used for automotive repair and sales operations and an approximately 1,320 square-foot residential structure (the "Lot 26 Residential Building") (collectively, the "Site Buildings"). The Site is located in a mixed commercial and residential area of the City of Yonkers.

The Lot 30 portion of the Site operated as a Goodyear-branded automotive repair shop and tire sales center from 1974 until sometime in 2015. The Lot 30 Site Building and surrounding paved parking areas are currently occupied by the West Coast Auto Sales company, who have utilized the Site for the sale of used cars since sometime in 2016. The Lot 30 Site Building is also currently being utilized by individual tenants for automotive repair and service operations, and vehicle painting operations as well. The Lot 26 Residential Building was constructed sometime prior to 1897 and has been vacant since sometime in 2009. Prior to the development of the Lot 30 Site Building in 1974, the entire Site consisted of ten residential structures, one of which was removed by 1951, and six of which were removed circa 1973. Commercial improvements (i.e., an additional parking area) to the Lot 30 portion of the Site were completed in June 1980, at which time two more residential structures were removed from the Site.

Properties to the north of the Site currently consist of residential properties. The property to the east of the Site consists of Culver Park. The PEARLS Hawthorne School is located to the west of the Site, across Riverdale Avenue. To the south of the Site, across Culver Street, is a Citgo-branded gasoline filling station and residential properties. Further south of the Citgo-branded gasoline filling station is the Devonshire Discount Tire, Auto Body, and Repair Center.

Ransom's Phase I ESA report, dated June 7, 2017, identified the following Recognized Environmental Conditions (RECs) for which further investigation was recommended:

- REC 1 – Automotive Repair Drainage System:
    - REC 1A – Service Garage Sealed Floor Drain;
    - REC 1B – Boiler Room Sealed Floor Drain;
    - REC 1C – Parts Room Sealed Floor Drain;
    - REC 1D – Bathroom Floor Drains;
    - REC 1E – Employee Locker Room Sealed Floor Drain;
    - REC 1F – Tire Wash Area Floor Drain;
    - REC 1G – Former Hydraulic Lift Floor Drains; and
    - REC 1H – Former Grease and Sand Interceptor.
- REC 2 – Automotive Repair Hydraulic Lift Systems:

  - REC 2A – Hydraulic Lifts and Alignment Rack;
  - REC 2B – Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes;
  - REC 2C – Former Hydraulic Lifts, Air/Hydraulic Alignment Rack and Underground Hydraulic Oil Reservoirs;
  - REC 2D – Hydraulic Lift Control Boxes; and
  - REC 2E – Former Air Compressors.
- REC 3 – Vehicle Storage;
- REC 4 – Inactive Oil-Fired Boiler System;
- REC 5 – Former 3,000-gallon Fuel Oil UST;
- REC 6 – Former 550-gallon Waste Oil UST;
- REC 7 – 55-Gallon Waste Oil Drum Storage;
- REC 8 – Current/Former Residential Use:
  - REC 8A – Known Fuel Oil Use at Residential Building; and
  - REC 8B – Former Residential Use.
- REC 9 – Potential Fill; and
- REC 10 – Potential Off-Site Sources:
  - REC 10A – Off-Site Citgo Service Station;
  - REC 10B – Off-Site Devonshire Discount Tire, Auto Body & Repair Center; and
  - REC 10C – Former Riverdale Auto Service Inc.

Based on the findings and conclusions presented above, Ransom made the following recommendations in our Phase I ESA to address the above RECs:

- Ransom recommended that sub-slab soil samples be collected along the drainage pipes and on-Site sanitary sewer lines associated with the automotive repair floor drains (REC 1). In an effort to target potential heavily impacted areas, video inspection of the pipes for evidence of cracks or breaches was recommended as part of the geophysical survey recommended below. Based on the findings of the video inspection, soil sampling would be biased towards those areas of pipe cracks/breaches.
- Ransom recommended the completion of a geophysical survey across the Site in an effort to: (1) confirm the removal of the 3,000-gallon fuel oil UST (REC 5) and 550-gallon waste oil UST (REC 6) presumably removed from the Site in 1995; and (2) assess if historic USTs, former product piping, and/or septic tanks are present from the current/former residential use (REC 8). If anomalies are identified, further subsurface investigation may be warranted.
- A subsurface soil and groundwater investigation was recommended prior to the initiation of construction activities. Ransom recommended the following soil and groundwater monitoring program be completed prior to redevelopment activities:

  - Ransom recommended the collection of sub-slab soil and groundwater samples from beneath the current/former hydraulic lifts and one hydraulic alignment rack (RECs 2A and REC 2C) within the Lot 30 Site Building.
  - Ransom recommended the collection of sub-slab soil samples from beneath the five-identified wall-mounted hydraulic fluid reservoirs (REC 2B) within the Lot 30 Site Building immediately adjacent to the exposed subsurface piping.
  - Ransom recommended the collection of sub-slab soil samples immediately adjacent to the three floor-mounted control boxes (REC 2D) within the Lot 30 Site Building.
  - Ransom recommended the collection of subsurface soil and groundwater samples in the locations of the former 3,000-gallon fuel oil UST (REC 5) and 550-gallon waste oil UST (REC 6).
  - Ransom recommended the collection of subsurface soil samples at the location of the crack observed near the former waste oil drum storage/staining (REC 7).
  - Ransom recommended the collection of subsurface soil samples at the location of the potential historical fill area (REC 9).
  - Ransom recommended the installation of temporary groundwater monitoring points and/or soil borings along the southern boundary of the Site to evaluate potential off-Site impacts to the Site (REC 10).

- Since there were physical obstructions (e.g., stored vehicles, dirt, welded doors, etc.), which represented a significant data gap, and based on historical operations, Ransom recommended the physical obstructions be removed and further inspection completed of the ground surface areas beneath the former air compressor (REC 2E), the stored vehicles (REC 3), the inactive oil-fired burner (REC 4) and potential residential fuel-oil fired boiler (REC 8). Further investigative activities may be warranted based on the findings.
- Ransom recommended the proper disposal of the fuel oil-fired burner and its contents (e.g., waste ash) (REC 8) identified within the Lot 30 Site Building. After removal, Ransom recommended further inspection of the surface areas beneath the fuel oil-fired burner. Further investigative activities may be warranted based on the findings.
- The 55-gallon drums present on-Site should be removed from the Site and properly disposed of prior to Site construction activities, and documentation of their disposal should be maintained with a copy provided to CVS.
- On-Site drainage structures, including potential septic system components and/or storm water drainage structures (catch basins, etc.), that will not be reused as part of the Site redevelopment should be properly decommissioned according to local, state, and federal requirements. If evidence of contamination is identified during decommissioning of these structures, Ransom should be contacted to evaluate whether additional investigation or cleanup is warranted.
- Ransom recommended that miscellaneous chemicals, hazardous materials and/or stored appliances observed at the Site should be recovered/removed from the Site and properly disposed/recycled (by a certified technician where applicable) prior to proposed redevelopment activities.

A copy of the REC plan is included as Figure 3.

## PHASE II LIMITED SUBSURFACE INVESTIGATION

Geophysical Investigation and Subsurface Floor Drain Imaging

Between June 27 and June 29, 2017, Advanced Geological Services (AGS) of Malvern, Pennsylvania performed a geophysical survey at the Site. The purpose of the geophysical survey was to identify and locate evidence of subsurface structures, including, but not limited to, current on-Site USTs, former on-Site USTs, and/or former UST excavation/backfill area(s), product piping, septic tank systems, cesspools and/or drywells, former and/or current drain systems, and foundations or former foundation areas associated with the former Site structure(s). Proposed drilling locations on both the Lot 26 and Lot 30 portions of the Site were cleared of identifiable drilling hazards (i.e., subsurface utilities, etc.) at this time as well. The proposed drilling locations were adjusted to avoid any identified hazards, where necessary, with the approval of Ransom. Additionally, an effort was made to complete imaging and evaluation of piping associated with the two identified floor drains within the former Goodyear Automotive Service Center building to evaluate for breaches within the piping.

The geophysical survey was conducted using a combination of ground penetrating radar (GPR), radio frequency (RF), hand-held electromagnetic (HHEM), and/or multi-frequency electromagnetic meter (EM). The geophysical investigation area consisted of the asphalt parking lot surrounding the Lot 30 Site Building, the interior of the Lot 30 Site Building, and exterior surface areas on the Lot 26 portion of the Site. The following anomalies/features were identified during the geophysical investigation activities:

- A backfilled excavation (presumably from the former 500-gallon UST) was identified near the southeast corner of the Lot 30 Site Building. An associated vent pipe (visible at the southeast corner of the building) was identified as extending to the edge of the excavation; and

- A suspect UST was located on the east side of the Lot 30 Site Building, near the northeast corner. This feature produced an EM response with the hand-held EM metal detection instrument and also an ambiguous GPR response. A vent pipe located on the building wall and a potential supply/return line were also identified leading from the building to the suspect UST location. The geophysical results at this location were not conclusive; therefore, AGS recommended that additional direct investigation of this location, such as excavation, be considered to determine the presence of a UST at this location.

Geophysical survey activities conducted identified evidence of one suspect UST on Lot 30. The identified metallic anomaly measured approximately 6 feet in width by 16 feet in length, corresponding to an UST with an approximate volume between 3,000 and 4,000 gallons. The top of the UST was estimated to be approximately 4 to 5 feet bgs. Based on the size and location of this suspect UST, it is presumably associated with the closed (i.e., abandoned-in-place) 3,000-gallon heating oil UST (REC 5) associated with the Lot 30 Site Building. Geophysical survey activities conducted did not identify evidence of a current or former UST associated with the Lot 26 Residential Building. GPR results also suggested that fill or building rubble may be present throughout the Site.

The geophysical survey activities encountered several limitations, including the presence of parked/immovable vehicles within the interior vehicle storage area of the Lot 30 Site Building, the presence of parked/immovable vehicles along the southwestern, northern, and eastern boundaries of the Lot 30 portion of the Site, and the presence of steel reinforcing bar embedded within the concrete slab foundation of the Lot 30 Site Building. Based on the EM results and visual observations at the Site,

Ransom believes that these limitations do not warrant further investigation; however, due to these geophysical survey limitations, further response actions may be warranted during Site redevelopment if subsurface structures are identified.

Also during the geophysical event, attempts were made to access the floor drain system located inside of the south side of the Lot 30 Site Building. The camera was inserted into the clean-out located inside of the southeast corner of the building. However, there was a wire trap approximately 5-feet beyond the clean-out opening that prevented access. Attempts were made to access the drain system through three other clean-outs located along the length of the floor drain inside the south side of the building, but they were all filled with sediments preventing access. Due to Site conditions, it was not possible to inspect the floor drain system that extends from east to west inside the south side of the auto shop area.

The geophysical summary report is included as Appendix A, where Figure 1 of Appendix A shows the color contoured EM results from accessible areas of the Site. The report also shows the areas of the Site where limitations to the geophysical existed, including where cars were parked, and where portions of the Site were covered with reinforced concrete.

Subsurface Investigation

This section summarizes the investigation activities completed by Ransom, including soil boring installation and sampling and the installation of temporary monitoring well points to evaluate the potential environmental impacts to the Site from the identified RECs.

**Soil Boring and Temporary Monitoring Well Sampling Program**

Ransom conducted a soil boring investigation at the Site on June 27, 28, and 29, 2017. A total of 25 borings (SB-1 through SB-25) were advanced at the Site. Ransom advanced these borings concurrently with our Geotechnical Engineering Evaluation conducted at the Site (borings B101 through B108). The Geotechnical report has been provided separately. Soil boring locations are depicted on Figure 4. Soil borings were advanced by Environmental Probing Investigations, Inc. (EPI) of Cream Ridge, NJ utilizing direct push Geoprobe® technology with acetate-lined macro-core samplers. The soil boring depths ranged from 3.0 to 30 feet below grade surface (bgs). Subsurface explorations generally encountered brown and tan silt with trace fine sand to approximately 8 feet bgs and brown and tan fine to medium sands between approximately 8 feet bgs and 20 feet bgs. Fill material, including brick and coarse gravel, was encountered within four soil borings (SB-14, SB-21, SB-22, and SB-24) at depths ranging between 0.5 and 4.0 feet bgs. Also, during geotechnical drilling, refusal (i.e., the depth below which the hollow-stem auger was not able to penetrate the deeper geologic formations) was encountered in two of the Site borings at depths of approximately 7 and 17 feet below existing grades (B105 and B103, respectively, see Figure 4). Rock coring was not conducted to confirm the drilling refusal surfaces. It is our opinion that the shallow refusal in B103 was on a large boulder or buried foundation stone, and not on bedrock. The deeper drilling refusal in B105 was likely at the top of competent bedrock.

A total of 30 soil samples were collected from corresponding soil borings (SB-1 through SB-25) at six-inch intervals ranging from 0.5 to 9.0 feet bgs. Soil samples were not collected from soil borings SB-4 and SB-5 due to encountering drilling refusal and/or underground utilities at these locations. Soils within each boring were observed for visual and olfactory evidence of impacts. Petroleum odors were observed within one soil boring (SB-23) at an approximate depth range of 3.5 to 4.0 feet bgs; however, no staining was observed within the soil borings advanced at the Site. Additionally, a photoionization detector (PID)

was utilized to screen the soil for the presence of volatile organic vapors. Field screening of the soil borings identified elevated PID readings within one soil boring, SB-23, ranging from 3.2 to 6.8 parts per million (ppm) at an approximate depth of 3.0 to 6.5 feet bgs. Soil boring logs are provided as Appendix B.

Additionally, eight test borings (B101 through B108) were advanced at the Site as part of the geotechnical evaluation activities. The geotechnical borings were advanced using hollow-stem auger drilling techniques with slit-barrel sampling and standard penetration testing (SPT, ASTM D 1586). Representative soil samples (B101 through B108) were placed in sealed containers and returned to Ransom's office for further evaluation and laboratory testing. Soil samples were classified in general accordance with visual-manual procedures (ASTM D 2488). Geotechnical sampling results and associated geotechnical logs will be presented within a project geotechnical report under a separate cover that will contain recommendations and design parameters.

Soil samples were collected and sent to Hampton Clarke Laboratories (Hampton-Clarke) of Fairfield, New Jersey to be analyzed for a Targeted Compound List of Volatile Organic Compounds (TCL/CP-51 VOCs) in accordance with the New York State Department of Environmental Conservation (NYSDEC) CP-51 Soil Cleanup Guidance via United States Environmental Protection Agency (USEPA) Method 8260, a Targeted Compound List of Semi-Volatile Organic Compounds (TLC/CP-51 SVOCs) in accordance with the NYSDEC CP-51 Soil Cleanup Guidance, Polychlorinated Biphenyls (PCBs) via USEPA Method 8082, Polycyclic Aromatic Hydrocarbons (PAHs) via USEPA Method 8270, the Target Analyte List of Metals (TAL Metals) via USEPA Methods 6010/6020, and/or a Targeted Compound List of Pesticides (TCL Pesticides) via USEPA Method 8081. Additionally, one composite sample was collected from soil boring SB-24 for preliminary waste characterization purposes and was analyzed for VOCs with a forward library search for up to fifteen additional compounds (VOCs+15) via USEPA Method 8260, SVOCs with a forward library search for up to fifteen compounds (SVOCs+15) via USEPA Method 8270, PCBs via USEPA Method 8082, Organochlorine Pesticides via USEPA Method 8081, TAL Metals via USEPA Method 6010/6020, and Cyanide via USEPA Method 9012B. Soil sampling analytical results are summarized on Table 1, and soil analytical results exceeding applicable NYSDEC Soil Cleanup Objectives (SCOs) are illustrated on Figure 5A and Figure 5B. The following soil sampling analytical program was followed for the Phase II LSI activities and previously identified RECs:

| Sample ID | Date | REC(s) | Analysis |
|---|---|---|---|
| SB-1 | 6/27/2017 | REC 1H | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, and TAL Metals |
| SB-2 | 6/29/2017 | REC 1 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, and TAL Metals |
| SB-3 | 6/27/2017 | REC 1 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, and TAL Metals |
| SB-6A | 6/29/2017 | REC 2B | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-6B | 6/29/2017 | REC 2A and REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-7 | 6/27/2017 | REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-8A | 6/27/2017 | REC 2B | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-8B | 6/27/2017 | REC 2A and REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-9A | 6/27/2017 | REC 2B | TCL/CP-51 VOCs, PCBs, and PAHs |

| Sample ID | Date | REC(s) | Analysis |
|---|---|---|---|
| SB-9B | 6/27/2017 | REC 2A and REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-10 | 6/27/2017 | REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-11A | 6/27/2017 | REC 2B | TCL/CP-51 VOCs, PAHs, and PCBs |
| SB-11B | 6/27/2017 | REC 2A and REC 2C | TCL/CP-51 VOCs, PAHs, and PCBs |
| SB-12 | 6/27/2017 | REC 2A and REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-13A | 6/27/2017 | REC 2B | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-13B | 6/27/2017 | REC 2A and REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-14A | 6/29/2017 | REC 2D | TCL/CP-51 VOCs and PAHs[1] |
| SB-14B | 6/29/2017 | REC 2D/REC 9 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, TAL Metals, and PCBs |
| SB-15 | 6/27/2017 | REC 2D | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-16 | 6/27/2017 | REC 2D | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-17 | 6/28/2017 | REC 5 | TCL/CP-51 VOCs and PAHs |
| SB-18 | 6/28/2017 | REC 6 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, TAL Metals, and PCBs |
| SB-19 | 6/27/2017 | REC 7 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, and TAL Metals |
| SB-20 | 6/28/2017 | REC 8A | TCL/CP-51 VOCs and PAHs |
| SB-21 | 6/28/2017 | REC 9 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, TAL Metals, PCBs, and TCL Pesticides |
| SB-22 | 6/27/2017 | REC 10 and REC 9 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, and TAL Metals |
| SB-23 | 6/28/2017 | REC 10 | TCL/CP-51 VOCs, PAHs, and TAL Metals |
| SB-24 | 6/29/2017 | REC 9 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, TAL Metals, and TCL Pesticides |
| SB-24C | 6/29/2017 | Preliminary Waste Characterization | TCL/CP-51 VOCs,+15 TCL/CP-51 SVOCs+15, TCL Pesticides, PCBs, TAL Metals, and Cyanide |
| SB-25 | 6/29/2017 | REC 2E and REC 11* | TCL/CP-51 VOCs, PCBs, PAHs, and TAL Metals |

*During Phase II LSI drilling activities, it was observed that the backroom was being utilized as a Vehicle Paint Shop (REC 11); therefore, this activity was added to the Site's REC list as REC 11, and one sample was collected concurrently with the REC 2E (former air compressors) soil sample.

Following soil boring and sampling activities, two soil borings (SB-23 and SB-22) were converted into temporary well points (TWPs) (TWP-1 and TWP-2, respectively). The TWPs were constructed with 1-inch diameter PVC 0.010-inch slotted screen and solid riser to depths ranging from 18.50 to 19.75 feet bgs. The two TWP locations are depicted on Figure 4, groundwater sampling analytical results are

[1] The PAH analysis was run out of hold time due to a recording error at one soil sample (SB-14A). Since this analytical parameter was only four of days out of hold time, this analysis may not represent worst-case scenario results, but can indicate if there is a potential for PAH-impacted soil; therefore, it can be utilized for the purposes of this Phase II LSI.

summarized on Table 2, and groundwater analytical results exceeding NYSDEC Ambient Water Quality Standards (AWQS) are depicted on Figure 6. Temporary well point TWP-1 was gauged and sampled on June 28, 2017, and TWP-2 was gauged and sampled on June 29, 2017. Groundwater was encountered in the temporary well points at an approximate depth of 8.0 feet bgs. Temporary well point logs are included as Appendix B. Groundwater samples were collected and submitted to Hampton-Clarke of Fairfield, New Jersey for analysis of TCL/CP-51 VOCs via USEPA Method 8260, TCL/CP-51 SVOCs via USEPA Method 8270, and Lead via USEPA Method 6020.

Following sampling, the borings were backfilled with the soil cuttings and bentonite hole plug to grade.

**Applicable Soil and Groundwater Regulatory Standards**

The applicable NYSDEC remediation standards for the soil and groundwater analytical results at the Site are as follows:

Soil: 6 NYCRR Part 375 (Tables 375-6.8(a) and (b), Effective December 14, 2006):
Unrestricted Use Soil Cleanup Objectives (SCOs)
Residential Use SCOs
Restricted-Residential SCOs
Commercial Use SCOs
Industrial Use SCOs
Protection of Ecological Resources SCOs
Protection of Groundwater SCOs

Groundwater: 6 NYCRR Part 703 (Table 1, reissued June 1998) and Draft Ambient Water Quality Standards, Guidance Values and Groundwater Effluent Limitations (Table 1, drafted November 1999):
Ambient Water Quality Standards (AWQS)

An account of the soil sampling activities is discussed below, and the laboratory data reports are included in Appendix C. Soil sampling analytical results are summarized on Table 1, and groundwater sampling analytical results are summarized on Table 2.

**REC 1 – Automotive Repair Drainage System**

*REC 1A – Service Garage Sealed Floor Drain // REC 1G – Former Hydraulic Lift Floor Drains // REC 1H – Former Grease and Sand Interceptor – Soil Sampling and Analytical Results*

A total of three soil borings (SB-1, SB-2, and SB-3) were advanced to a maximum depth of five feet bgs in the vicinity of the service garage sealed floor drains, former hydraulic lift floor/trench drains, and the former grease and sand interceptor identified within the Lot 30 Site Building for assessment of the former automotive repair drainage system. Field screening of the soil borings did not identify elevated PID readings. In the absence of field evidence of impacts, one soil sample was collected between 3.0 to 3.5 feet bgs, the presumed invert of the former grease and sand interceptor, from soil boring SB-1; and one soil sample was collected from both SB-2 and SB-3 between 0.5 to 1.0 feet bgs, the presumed invert of the former drainage systems. Soil samples SB-1 through SB-3 were analyzed for TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, and TAL Metals. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-1

- Barium, at a concentration of 360 milligrams per kilogram (mg/kg), exceeded the Unrestricted Use SCO (350 mg/kg) and the Residential Use SCO (350 mg/kg);
- Total chromium, at a concentration of 78 mg/kg, exceeded the Unrestricted Use SCO for trivalent chromium (30 mg/kg) and hexavalent chromium (1 mg/kg), Residential Use SCO for trivalent chromium (36 mg/kg) and hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for trivalent chromium (41 mg/kg) and hexavalent chromium (1 mg/kg), and the Protection of Groundwater Use SCO for hexavalent chromium (19 mg/kg);
- Copper, at a concentration of 69 mg/kg, exceeded the Unrestricted Use SCO (50 mg/kg) and the Protection of Ecological Resources SCO (50 mg/kg);
- Lead, at a concentration of 620 mg/kg, exceeded the Unrestricted Use SCO (63 mg/kg), the Residential Use SCO (400 mg/kg), the Restricted Residential Use SCO (400 mg/kg), the Protection of Ecological Resources SCO (63 mg/kg), and the Protection of Groundwater SCO (450 mg/kg);
- Total mercury, at a concentration of 0.8 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater SCO (0.73 mg/kg); and
- Zinc, at a concentration of 410 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg).

Soil Sample SB-2

- Copper, at a concentration of 61 mg/kg, exceeded the Unrestricted Use SCO (50 mg/kg) and the Protection of Ecological Resources SCO (50 mg/kg);
- Lead, at a concentration of 520 mg/kg, exceeded the Unrestricted Use SCO (63 mg/kg), the Residential Use SCO (400 mg/kg), the Restricted Residential Use SCO (400 mg/kg), the Protection of Ecological Resources SCO (63 mg/kg), and the Protection of Groundwater SCO (450 mg/kg);
- Total chromium, at a concentration of 23 mg/kg, exceeded the Unrestricted Use SCO for hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);
- Total mercury, at a concentration of 1.9 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Residential Use SCO (0.81 mg/kg), the Restricted Residential Use SCO (0.81), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater SCO (0.73 mg/kg); and
- Zinc, at a concentration of 300 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg).

Soil Sample SB-3

- Total chromium, at a concentration of 17 mg/kg, exceeded the Unrestricted Use SCO for hexavalent chromium (1 mg/kg) and the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory reporting limits (RLs) or were detected at concentrations below the most stringent NYSDEC SCOs.

## REC 2 – Automotive Repair Hydraulic Lift Systems

*REC 2A – Hydraulic Lifts and Alignment Rack // REC 2B – Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes // REC 2C – Former Hydraulic Lifts, Air/Hydraulic Alignment Rack and Underground Hydraulic Oil Reservoirs – Soil Sampling and Analytical Results*

A total of eight soil borings (SB-6 through SB-13) were advanced to a maximum depth of 10 feet bgs in the vicinity of the existing hydraulic lifts and alignment rack, the wall-mounted hydraulic fluid reservoirs/control boxes, the former hydraulic lift system locations, and underground hydraulic oil reservoirs for assessment of the current and former hydraulic lift systems. Field screening of the soil borings did not identify elevated PID readings. In the absence of field evidence of impacts, one soil sample was collected from soil borings SB-7, SB-10, and SB-12 between 8.0 to 9.0 feet bgs, the presumed invert of the former hydraulic lift fluid reservoirs/alignment rack housing. Additionally, two samples were collected per boring location for soil borings SB-6, SB-8, SB-9, SB-11, and SB-13 between 0.5 to 1.0 feet bgs and 8.0 to 8.5 feet bgs to evaluate for impacts related to the wall mounted hydraulic fluid reservoirs as well as the current and former hydraulic lifts and underground fluid reservoirs, respectively. Soil samples were chemically analyzed for TCL/CP-51 VOCs, PAHs, and PCBs. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-9A[2]

- Benzo(a)pyrene, at a concentration of 1.2 mg/kg, exceeded the Industrial Use SCO (1.1 mg/kg); however, the concentration of 1.2 mg/kg was rounded to the number of significant digits (i.e., one) for Unrestricted Use SCO (1 mg/kg), the Residential Use SCO (1 mg/kg), the Restricted Residential Use SCO (1 mg/kg), and the Commercial Use SCO (1 mg/kg); therefore, the analytical result of 1.2 mg/kg was rounded to 1 mg/kg, which meets these NYSDEC SCOs;
- Benzo(b)fluoranthene, at a concentration of 1.7 mg/kg, exceeded the Unrestricted Use SCO (1 mg/kg), the Residential Use SCO (1 mg/kg), and the Restricted Residential Use SCO (1 mg/kg); and
- Indeno(1,2,3-cd)pyrene, at a concentration of 0.74 mg/kg, exceeded the Unrestricted Use SCO (0.5 mg/kg), the Residential Use SCO (0.5 mg/kg), and the Restricted Residential Use SCO (0.5 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

*REC 2D – Hydraulic Lift Control Boxes – Soil Sampling and Analytical Results*

A total of three soil borings (SB-14, SB-15, and SB-16) were advanced to a maximum depth of five feet bgs in the vicinity of the hydraulic lift control boxes identified within the Lot 30 Site Building for assessment of potential impacts related to the identified hydraulic lift control boxes. SB-14 was completed within a heavily stained area of concrete, where potential breaching around the control box

[2] Benzo(a)anthracene and chrysene were detected with a concentration of 1.3 mg/kg and 1.2 mg/kg, respectively; therefore, the analytical results of 1.3 mg/kg and 1.2 mg/kg were rounded to the number of significant digits (i.e., one) of the applicable standard for benzo(a)anthracene and chrysene (i.e., the NYSDEC's Unrestricted Use SCO of 1 mg/kg); therefore, the analytical results of 1.3 mg/kg and 1.2 mg/kg were rounded to 1 mg/kg, which meets the applicable the NYSDEC's Unrestricted Use SCO.

was evident. Field screening of the soil borings did not identify elevated PID readings. In the absence of field evidence of impacts one soil sample was collected at each boring location between 0.5 to 1.0 feet bgs, the presumed invert of the hydraulic lift control box piping infrastructure, with the exception of soil sample SB-14B, which was collected between 1.5 to 2.0 feet bgs. Soil samples were analyzed for TCL/CP-51 VOCs, TCL/CP-51 SVOCs, TAL Metals, and PCBs for this REC. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-14B

- Total aroclor, at a concentration of 0.16 mg/kg, exceeded the Unrestricted Use SCO (0.1 mg/kg);
- Cadmium, at a concentration of 3.7 mg/kg, exceeded the Unrestricted Use SCO (2.5 mg/kg) and the Residential Use SCO (2.5 mg/kg);
- Total chromium, at a concentration of 36 mg/kg, exceeded the Unrestricted Use SCO for trivalent chromium (30 mg/kg) and hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);
- Copper, at a total concentration of 4,900 mg/kg, exceeded the Unrestricted Use SCO (50 mg/kg), the Residential Use SCO (270 mg/kg), the Restricted Residential Use SCO (270 mg/kg), the Commercial Use SCO (270 mg/kg), the Protection of Ecological Resources SCO (50 mg/kg), and the Protection of Groundwater Use SCO (450 mg/kg);
- Total mercury, at a concentration of 3 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Residential Use SCO (0.81 mg/kg), the Restricted Residential Use SCO (0.81 mg/kg), the Commercial Use SCO (2.8 mg/kg), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater Use SCO (0.73 mg/kg); and
- Zinc, at a total concentration of 580 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources Use SCO (109 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

*REC 2E – Former Air Compressors and REC 11 – Vehicle Painting Operations – Soil Sampling and Analytical Results*

One soil boring (SB-25) was advanced to a maximum depth of five feet bgs in the vicinity of the former air compressor locations identified within the Lot 30 Site Building where moderate staining on the flooring beneath the former air compressor was observed to evaluate for potential impacts related to former service station operations. Since vehicle painting operations were also conducted within the vicinity of this area, SB-25 was also used to evaluate these ongoing activities as well. Field screening of the soil boring did not identify elevated PID readings. In the absence of field evidence of impacts, one soil sample was collected from boring location SB-25 between 0.5 to 1.0 feet bgs, just below the concrete slab of the Lot 30 Site Building. Soil sample SB-25 was analyzed for TCL/CP-51 VOCs, PCBs, PAHs, and TAL Metals. Analytical results identified the following exceedances of the NYSDEC SCOs:

Soil Sample SB-25

- Total chromium, at a concentration of 32 mg/kg, exceeded the Unrestricted Use SCO for trivalent chromium (30 mg/kg) and hexavalent chromium (1 mg/kg), the Residential Use SCO

for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);

- Lead, at a concentration of 260 mg/kg, exceeded the Unrestricted Use SCO (63 mg/kg) and the Protection of Ecological Resources SCO (63 mg/kg);
- Total mercury, at a concentration of 0.25 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg) and the Protection of Ecological Resources SCO (0.18 mg/kg); and
- Zinc, at a concentration of 120 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

**REC 3 – Vehicle Storage – Investigation Results**

Ransom identified several areas utilized for the storage of used vehicles in relation to the automotive sales and repair operations at the Site during the June 2017 Phase I ESA activities. Vehicle storage areas were identified within the northeastern most portion of the Lot 30 Site Building as well as along the paved parking areas of the Lot 30 portion of the Site. Ransom conducted a visual inspection of the surface areas beneath the parked vehicles during the Phase II LSI activities conducted between July 27, 2017 through July 29, 2017. No evidence of cracks, breaches, or apparent impacts were identified during investigation activities; therefore, no soil samples were collected and vehicle storage is no longer considered a REC.

**REC 4 – Inactive Oil-Fired Burner – Investigation Results**

Ransom was unable to complete subsurface soil investigation activities in the vicinity of the in-active oil-fired burner during the Phases II LSI activities due to the presence of underground utilities in this area; therefore, a soil sample could not be collected representative of potential impacts at REC 4. Visual inspection of the surface conditions in the vicinity of the inactive oil-fired burner did not identify breaches within the concrete slab; however, a significant layer of dust/potential waste ash was noted.

**REC 5 – Former 3,000-gallon Fuel Oil UST – Soil Sampling and Analytical Results**

Geophysical survey activities conducted on June 28, 2017 identified one subsurface metallic anomaly indicative of an UST in the presumed location of the former 3,000-gallon fuel oil UST, located on the northeast side of the Lot 30 Site Building. One soil boring, SB-17, was advanced down-gradient (i.e., to the northwest) of the identified metallic anomaly/presumed 3,000-gallon fuel oil UST to evaluate potential impacts associated with this UST. Field screening of the soil boring did not identify elevated PID readings; additionally, no odors and/or staining were observed in the soil boring. Soil sample SB-17 was collected between 8.0 to 8.5 feet bgs, the presumed invert of the former 3,000-gallon fuel oil UST, and analyzed for TCL/CP-51 VOCs and PAHs. All analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the NYSDEC's most stringent SCOs.

**REC 6 – Former 550-gallon Waste Oil UST – Soil Sampling and Analytical Results**

Geophysical survey activities conducted on June 28, 2017 did not identify a subsurface anomaly indicative of an UST in the presumed location of the former 550-gallon waste oil UST, located on the southeast exterior corner of the Lot 30 Site Building.

One soil boring, SB-18, was advanced in the location of the former 550-gallon waste oil UST to evaluate potential impacts associated with this former UST. Field screening of the soil boring did not identify elevated PID readings; additionally, no odors and/or staining were observed in the soil boring. In the absence of field evidence of impacts, soil sample SB-18 was collected between 7.0 to 7.5 feet bgs, the approximate depth of the invert of the former UST, and was analyzed for TCL/CP-51 VOCs, TCL/CP-51 SVOCs, TAL Metals, and PCBs. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-18

- Total chromium, at a concentration of 31 mg/kg, exceeded the Unrestricted Use SCO for trivalent chromium (30 mg/kg) and hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg); and
- Manganese, at a concentration of 1,800 mg/kg, exceeded the Unrestricted Use SCO (1,600 mg/kg) and the Protection of Ecological Resources SCO (1,600 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

**REC 7 – 55-gallon Waste Oil Drum Storage – Soil Sampling and Analytical Results**

One soil boring, SB-19, was advanced to a maximum depth of five feet bgs in the vicinity of the identified staining and a breach in the concrete floor within the service garage area of the Lot 30 Site Building, associated with the former storage of 55-gallon drums, to evaluate for potential impacts related to the presumed storage/disposal of waste oil. Field screening of the soil boring did not identify elevated PID readings; in addition, no evidence of odors and/or staining were observed in the soil boring. In the absence of field evidence of impacts, one soil sample was collected between 0.5 to 1.0 feet bgs, directly beneath the concrete slab foundation breach of the Lot 30 Site Building. Soil sample SB-19 was analyzed for TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, and TAL Metals. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-19

- Lead, at a concentration of 130 mg/kg, exceeded the Unrestricted Use SCO (63 mg/kg) and the Protection of Ecological Resources SCO (63 mg/kg);
- Total chromium, at a concentration of 13 mg/kg, exceeded the Unrestricted Use SCO for hexavalent chromium (1 mg/kg) and the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg); and
- Total mercury, at a concentration of 0.33 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg) and the Protection of Ecological Resources SCO (0.18 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

**REC 8 – Current/Former Residential Use**

*REC 8A – Current Residential Use – Geophysical Survey Results*

Property records obtained by Ransom during the June 2017 Phase I ESA activities indicated the usage of fuel oil on the Lot 26 portion of the Site. Geophysical survey activities were conducted on June 28, 2017, in the vicinity of the Lot 26 Residential Building, to evaluate for the potential presence of a fuel oil UST; however, no evidence of an UST or associated piping was identified associated with REC 8A.

*REC 8B – Former Residential Use – Geophysical Survey Results*

Historic records obtained by Ransom during the June 2017 Phase I ESA activities identified the presence of eight residential structures (not including the current Lot 26 Residential Building) at the Site prior to redevelopment activities in 1974 and 1980. Ransom conducted Site-wide geophysical survey activities between June 27 and June 29, 2017 to evaluate subsurface conditions for the presence of anomalies indicative of former structures, foundations, and/or previously unknown USTs. Geophysical survey activities did not identify subsurface anomalies related to the former residential use on-Site; however, several limitations were encountered during surveying activities, resulting in a partial survey of the Site (See section "Geophysical Investigation" Section above). Based on the geophysical findings and general Phase II results, Ransom believes that these limitations do not warrant further investigation; however, due to these geophysical survey limitations, further response actions may be warranted during Site redevelopment if subsurface structures are identified.

*REC 8A – Former Fuel Oil Use at Current Residential Building – Soil Sampling and Analytical Results*

One soil boring, SB-20, was advanced in the vicinity of a sealed fill pipe, identified during the June 2017 Phase I ESA activities on the eastern side of the Lot 26 Residential Building, to evaluate for potential impacts related to the known fuel oil use. Soil boring SB-20 was advanced to a total depth of 8 feet bgs. Field screening of the soil boring did not identify elevated PID readings; in addition, no odors and/or staining were observed in the soil boring. In the absence of field evidence of impacts, one sample was collected from the first six inches of native soils between approximately 0.0 to 0.5 feet bgs and analyzed for TCL/CP-51 VOCs and PAHs. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-20:

- Benzo(a)anthracene, at a concentration of 1.7 mg/kg, exceeded the Unrestricted Use SCO (1 mg/kg), the Residential Use SCO (1 mg/kg), the Restricted Residential Use SCO (1 mg/kg), and the Protection of Groundwater SCO (1 mg/kg);
- Benzo(a)pyrene, at a concentration of 1.5 mg/kg, exceeded the Unrestricted Use SCO (1 mg/kg), the Residential Use SCO (1 mg/kg), the Restricted Residential Use SCO (1 mg/kg), the Commercial Use SCO (1 mg/kg), and the Industrial Use SCO (1.1 mg/kg);
- Benzo(b)fluoranthene, at a concentration of 1.9 mg/kg, exceeded the Unrestricted Use SCO (1 mg/kg), the Residential Use SCO (1 mg/kg), the Restricted Residential Use SCO (1 mg/kg), and the Protection of Groundwater SCO (1.7 mg/kg);

- Chrysene, at a concentration of 1.6 mg/kg, exceeded the Unrestricted Use SCO (1 mg/kg), the Residential Use SCO (1 mg/kg), and the Protection of Groundwater SCO (1 mg/kg); and
- Indeno(1,2,3-cd)pyrene, at a concentration of 0.98 mg/kg, exceeded the Unrestricted Use SCO (0.5 mg/kg), the Residential Use SCO (0.5 mg/kg), and the Restricted Residential Use SCO (0.5 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

**REC 9 – Potential Fill**

*Soil Sampling and Analytical Results*

One soil boring, SB-21, was advanced to a maximum depth of 10 feet bgs to evaluate for potential fill material on the eastern boundary of the Lot 30 portion of the Site. Material indicative of historic fill (i.e., red brick) was identified at depths ranging from 0.5 to 3.0 feet bgs within soil borings SB-14, SB-21, SB-22, and SB-24 during the Phase II LSI activities. Field screening of the soil boring did not identify elevated PID readings. In addition, no evidence of odors and/or staining was observed in the boring. In the absence of field evidence of impacts, one soil sample was collected at the six-interval exhibiting evidence of fill material (i.e. red brick). Soil samples SB-14B, SB-21, SB-22, and SB-23 were analyzed for TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, TAL Metals, and/or TCL Pesticides for this REC. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-14B

- Total aroclor (specifically Aroclor-1260), at a concentration of 0.16 mg/kg, exceeded the Unrestricted Use SCO (0.1 mg/kg);
- Cadmium, at a concentration of 3.7 mg/kg, exceeded the Unrestricted Use SCO (2.5 mg/kg) and the Residential Use SCO (2.5 mg/kg);
- Total chromium, at a concentration of 36 mg/kg, exceeded the Unrestricted Use SCO for trivalent chromium (30 mg/kg) and hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);
- Copper, at a total concentration of 4,900 mg/kg, exceeded the Unrestricted Use SCO (50 mg/kg), the Residential Use SCO (270 mg/kg), the Restricted Residential Use SCO (270 mg/kg), the Commercial Use SCO (270 mg/kg), the Protection of Ecological Resources SCO (50 mg/kg), and the Protection of Groundwater Use SCO (450 mg/kg);
- Total mercury, at a concentration of 3 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Residential Use SCO (0.81 mg/kg), the Restricted Residential Use SCO (0.81 mg/kg), the Commercial Use SCO (2.8 mg/kg), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater Use SCO (0.73 mg/kg); and
- Zinc, at a total concentration of 580 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources Use SCO (109 mg/kg).

Soil Sample SB-21

- Arsenic, at a concentration of 27 mg/kg, exceeded the Unrestricted Use SCO (13 mg/kg), the Residential Use SCO (16 mg/kg), the Restricted Residential Use SCO (16 mg/kg), the

Commercial Use SCO (16 mg/kg), the Industrial Use SCO (16 mg/kg), the Protection of Ecological Resources SCO (13 mg/kg), and the Protection of Groundwater SCO (16 mg/kg);
- Copper, at a concentration of 87 mg/kg, exceeded the Unrestricted Use SCO (50 mg/kg) and the Protection of Ecological Resources SCO (50 mg/kg);
- Lead, at a concentration of 100 mg/kg, exceeded the Unrestricted use SCO (63 mg/kg) and the Protection of Ecological Resources SCO (63 mg/kg);
- Total chromium, at a concentration of 30 mg/kg, exceeded the Unrestricted Use SCO for hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);
- Total mercury, at a concentration of 28 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Residential Use SCO (0.81 mg/kg), the Restricted Residential Use SCO (0.81 mg/kg), the Commercial Use SCO (2.8 mg/kg), the Industrial Use SCO (5.7 mg/kg), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater SCO (0.73 mg/kg); and
- Zinc, at a concentration of 110 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg).

Soil Sample SB-22

- Lead, at a concentration of 280 mg/kg, exceeded the Unrestricted use SCO (63 mg/kg) and the Protection of Ecological Resources SCO (63 mg/kg);
- Total chromium, at a concentration of 29 mg/kg, exceeded the Unrestricted Use SCO for hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);
- Total mercury, at a concentration of 0.54 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg) and the Protection of Ecological Resources SCO (0.18 mg/kg); and
- Zinc, at a concentration of 180 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg).

Soil Sample SB-24

- Acetone[3], at a concentration of 0.25 mg/kg, exceeded the Unrestricted Use SCO (0.05 mg/kg) and the Protection of Groundwater SCO (0.05 mg/kg);
- Barium, at a concentration of 750 mg/kg, exceeded the Unrestricted Use SCO (350 mg/kg), the Residential Use SCO (350 mg/kg), the Restricted Residential Use SCO (400 mg/kg), the Commercial Use SCO (400 mg/kg), and the Protection of Ecological Resources SCO (433 mg/kg);
- Cadmium, at a concentration of 4.2 mg/kg, exceeded the Unrestricted Use SCO (2.5 mg/kg), and the Residential Use SCO (2.5 mg/kg). The concentration of 4.2 mg/kg was rounded to the number of significant digits (i.e., one) for the Protection of Ecological Resources SCO (4 mg/kg); therefore, the analytical result of 4.2 mg/kg was rounded to 4 mg/kg, which meets the Protection of Ecological Resources SCO;
- Total chromium, at a concentration of 45 mg/kg, exceeded the Unrestricted Use SCO for trivalent chromium (30 mg/kg) and for hexavalent chromium (1 mg/kg), the Residential Use

[3] It is known that acetone is a common laboratory or glassware contaminant. Since the acetone concentration was low and since there was only one exceedance of it, Ransom believes this concertation to be attributable to the lab.

SCO for trivalent chromium (36 mg/kg) and for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for trivalent chromium (41 mg/kg) and for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);

- Copper, at a concentration of 140 mg/kg, exceeded the Unrestricted Use SCO (50 mg/kg) and the Protection of Ecological Resources SCO (50 mg/kg);
- Lead, at a concentration of 4,300 mg/kg, exceeded the Unrestricted Use SCO (63 mg/kg), the Residential Use SCO (400 mg/kg), the Restricted Residential Use SCO (400 mg/kg), Commercial Use SCO (1,000 mg/kg), the Industrial Use SCO (3,900 mg/kg) the Protection of Ecological Resources SCO (63 mg/kg), and the Protection of Groundwater SCO (450 mg/kg);
- Total mercury, at a concentration of 0.89 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Residential Use SCO (0.81 mg/kg), the Restricted Residential Use SCO (0.81), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater SCO (0.73 mg/kg);
- Nickel, at a concentration of 36 mg/kg, exceeded the Unrestricted Use SCO (30 mg/kg) and the Protection of Ecological Resources SCO (30 mg/kg);
- Zinc, at a concentration of 1,500 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg);
- The pesticide p,p'-DDD, at a concentration of 0.028 mg/kg, exceeded the Unrestricted use SCO (0.0033 mg/kg) and the Protection of Ecological Resources SCO (0.0033 mg/kg); and
- The pesticide p,p'-DDE, with a concentration of 0.011 mg/kg, exceeded the Unrestricted use SCO (0.0033 mg/kg) and the Protection of Ecological Resources SCO (0.0033 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

**REC 10 – Potential Off-Site Sources**

*REC 10A – Off-Site Citgo Service Station // REC 10B – Off-Site Devonshire Discount Tire, Auto Body & Repair Center // REC 10C – Former Riverdale Auto Service Inc. - Soil and Groundwater Sampling and Analytical Results*

Soil boring SB-22 was advanced along the southwestern Lot 30 Site boundary, along Culver Street, and soil boring SB-23 was advanced along the southwestern Lot 30 Site boundary, along Riverdale Avenue, to evaluate potential impacts associated with possible off-Site sources identified adjacent to the Site. Soil borings SB-22 and SB-23 were advanced to a total depth of 18.50 feet bgs and 19.75 feet bgs, respectively. Field screening of soil borings identified elevated PID readings within one soil boring, SB-23, ranging from 3.2 to 6.8 ppm at an approximate depth of 3.0 to 6.5 feet bgs. Soil sample SB-23 was collected at the interval exhibiting the highest PID readings, between 3.5 to 4.0 feet bgs. In the absence of field evidence of impacts within soil boring SB-22, no soil sample was collected. Soil sample SB-23 was analyzed for TCL/CP-51 VOCs, PAHs, and TAL Metals. Analytical results of soil sample SB-23 were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

Soil borings SB-22 and SB-23 were converted to temporary well points (TWP-2 and TWP-1, respectively) to evaluate potential impacts associated with possible off-Site sources identified adjacent to the Site. Temporary well point TWP-1 was installed within soil boring SB-23, which was further

advanced to a total depth of 19.75 feet bgs, and temporary well point TWP-2 was installed within soil boring SB-22, which was further advanced to a total depth of 18.50 feet bgs. Temporary well point TWP-1 was gauged and sampled on June 29, 2017, at which time depth to water was measured at approximately 8.0 feet bgs, while TWP-2 was gauged and sampled on June 28, 2017, at which time depth to water was measured at approximately 8.0 feet bgs. Temporary well point groundwater samples were analyzed for TCL/CP-51 VOCs, TCL/CP-51 SVOCs, and lead. Groundwater sampling analytical results identified the following exceedances of the AWQS:

Groundwater Sample TWP-1

- 1,2,4-Trimethylbenzene, at a concentration of 2,500 micrograms per liter (µg/L), exceeded the AWQS (5 µg/L);
- 1,3,5-Trimethylbenzene, at a concentration of 890 µg/L, exceeded the AWQS (5 µg/L).
- Acetone, at a concentration of 140 µg/L, exceeded the AWQS (50 µg/L);
- Benzene, at a concentration of 94 µg/L, exceeded the AWQS (1 µg/L);
- Ethylbenzene, at a concentration of 1,700 µg/L, exceeded the AWQS (5 µg/L);
- Isopropyl-benzene, at a concentration of 250 µg/L, exceeded the AWQS (5 µg/L);
- m&p-Xylenes, at a concentration of 4,600 µg/L, exceeded the AWQS (5 µg/L);
- n-Butylbenzene, at a concentration of 30 µg/L, exceeded the AWQS (5 µg/L);
- n-Propylbenzene, at a concentration of 560 µg/L, exceeded the AWQS (5 µg/L);
- o-Xylene, at a concentration of 410 µg/L, exceeded the AWQS (5 µg/L);
- sec-Butylbenzene, at a concentration of 25 µg/L, exceeded the AWQS (5 µg/L);
- Toluene, at a concentration of 150 µg/L, exceeded the AWQS (5 µg/L);
- Xylenes (total), at a concentration of 5,000 µg/L, exceeded the AWQS (5 µg/L);
- 2,4-Dimethylphenol, at a concentration of 10 µg/L, exceeded the AWQS (1 µg/L);
- Naphthalene, at a concentration of 160 µg/L, exceeded the AWQS (10 µg/L); and
- Lead (unfiltered), at a concentration of 27 µg/L, exceeded the AWQS (25 µg/L).

Groundwater Sample TWP-2

- 1,2,4-Trimethylbenzene, at a concentration of 740, exceeded the AWQS (5 µg/L);
- 1,3,5-Trimethylbenzene, at a concentration of 87 µg/L, exceeded the AWQS (5 µg/L);
- Acetone, at a concentration of 63 µg/L, exceeded the AWQS (50 µg/L);
- Benzene, at a concentration of 560 µg/L, exceeded the AWQS (1 µg/L);
- Ethylbenzene, at a concentration of 660 µg/L, exceeded the AWQS (5 µg/L);
- Isopropyl-benzene, at a concentration of 100 µg/L, exceeded the AWQS (5 µg/L);
- m&p-xylenes, at a concentration of 960 µg/L, exceeded the AWQS (5 µg/L);
- Methyl-t-butyl ether (MTBE), at a concentration of 140 µg/L, exceeded the AWQS (10 µg/L);
- n-Propylbenzene, at a concentration of 200 µg/L, exceeded the AWQS (5 µg/L);
- o-Xylene, at a concentration of 130 µg/L, exceeded the AWQS (5 µg/L);
- sec-Butylbenzene, at a concentration of 11 µg/L, exceeded the AWQS (5 µg/L);
- Toluene, at a concentration of 67 µg/L, exceeded the AWQS (5 µg/L);
- Xylenes (total), at a concentration of 1,100, exceeded the AWQS (5 µg/L);
- 2,4-Dimethylphenol, at a concentration of 3.7 µg/L, exceeded the AWQS (1 µg/L);
- Naphthalene, at a concentration of 87 µg/L, exceeded the AWQS (10 µg/L);
- Phenol, at a concentration of 4.6 µg/L, exceeded the AWQS (1 µg/L); and
- Lead (unfiltered), at a concentration of 33 µg/L, exceeded the AWQS (25 µg/L).

Additionally, due to the high concentrations of VOC and SVOC concentrations within groundwater samples TWP-1 and TWP-2, the laboratory RLs for several remaining analyzed constituents of concern exceeded the NYSDEC AWQS; please refer to Table 1 for a review of RL exceedances. All other analyzed constituents were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC AWQS.

**Preliminary Waste Characterization**

One composite soil sample, SB-24C, was collected from soil boring SB-24 for preliminary waste classification purposes. Soil sample SB-24 was a five-point composite sample collected at varying intervals between approximately 0.5 to 10.0 feet bgs. Field screening of the soils within soil boring SB-24 did not identify elevated PID readings; however fill material, including brick and coarse gravel, was encountered at a depth ranging from 0.5 and 4.0 feet bgs. In addition, no evidence of odors and/or staining were observed within the boring. Soil sample SB-24C was analyzed for VOCs+15, SVOCs+15, PCBs, TCL Pesticides, TAL Metals, and Cyanide. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-24C

- Lead, at a concentration of 290 mg/kg, exceeded the Unrestricted Use SCO (63 mg/kg) and the Protection of Ecological Resources SCO (63 mg/kg);
- Total chromium, at a concentration of 26 mg/kg, exceeded the Unrestricted Use SCO for hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);
- Total mercury, at a concentration of 1.4 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Residential Use SCO (0.81 mg/kg), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater SCO (0.73 mg/kg); and
- Zinc, at a concentration of 200 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

**SUMMARY AND RECOMMENDATIONS**

Summary

Ransom performed a Phase II LSI at the Site to assess soil and groundwater quality relative to the RECs identified during Ransom's Phase I ESA. Soil samples were collected from around the Site to evaluate the potential environmental impacts to the Site from the identified RECs. Groundwater samples were collected from two temporary well points installed at upgradient locations on Site to evaluate the potential environmental impacts to the Site from potential off-Site sources of contamination.

**REC 1 – Automotive Repair Drainage System**

Soil sampling analysis identified metals concentrations, including barium, total chromium, copper, lead, total mercury, and zinc, that exceeded the NYSDEC's most stringent SCOs, including the Unrestricted Use SCO, the Protection of Groundwater Use SCO, the Residential Use SCO, and/or the Restricted

Residential Use SCO within soil borings collected in the vicinity of the former grease and sand interceptor, former hydraulic lift floor drains, and service garage sealed floor drains. Ransom's review of the data shows that the identified metals concentrations are comparable to the soil sampling results associated with the identified historic fill impacts on-Site (REC 9); therefore, it is more likely that fill materials below the building are the source of the metals concentrations. Further, although the identified concentrations exceed various SCOs, Ransom believes that these findings are not reportable to the NYSDEC since no known spill or release of metals was identified and the concentrations do not exceed the standards for the current and proposed land use (Commercial). Based on these findings, Ransom concludes that no further action is warranted at this time, provided the Site remains in Commercial Use.

However, soil displaced during construction activities potentially containing elevated metals concentrations, and which will be disposed off-site, will require proper waste characterization testing and disposal at an appropriately licensed receiving facility.

**REC 2 – Automotive Repair Hydraulic Lift Systems and REC 11 – Vehicle Painting Operations**

*REC 2A – Hydraulic Lifts and Alignment Rack // REC 2C – Former Hydraulic Lifts, Air/Hydraulic Alignment Rack, and Underground Hydraulic Oil Reservoirs*

Field screening and subsequent soil analytical results did not exceed the most stringent NYSDEC SCOs; therefore, Ransom concludes that potential environmental concerns originating from the current or former hydraulic lift system have not significantly impacted the subsurface soils at the Site. Based on the soil sampling analytical results completed as part of the subsurface investigation to evaluate potential impacts, Ransom concludes that gross impacts in connection with the lifts are not present. However, it is possible that limited/residual impacts to the soil beneath and immediately surrounding the lifts are possible. Prior to, or concurrent with, Site redevelopment activities, Ransom recommends the proper decommissioning and removal of the hydraulic lifts. Since impacts were not identified, further investigation is not recommended at this time; however, if impacts are identified during Site reconstruction activities, further investigation and/or response actions may be warranted.

*REC 2B – Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes*

Soil sampling analysis identified concentrations of PAHs (specifically benzo[a]pyrene, benzo[b]fluoranthene, and indeno[1,2,3-cd]pyrene) that exceeded the NYSDEC Unrestricted Use SCO, Residential Use SCO, the Restricted Residential Use SCO, and/or the Industrial Use SCO within one soil sample (SB-9A), collected at the presumed invert of the wall-mounted hydraulic fluid reservoir piping associated with the hydraulic lift system within Bay 4 of the Lot 30 Site Building. These identified impacts are presumed to either be related to the current hydraulic fluid reservoir piping leading to the lift system or the historical fill across the Site. Based on these findings, Ransom concludes that further investigation of the identified PAH (i.e., benzo[a]pyrene) that exceeded the Industrial Use SCO is warranted. Prior to, or concurrent with, Site redevelopment activities, Ransom recommends a background investigation and/or delineation event to determine the source, followed by remediation of the identified benzo(a)pyrene impact, if applicable. Ransom recommends that the NYSDEC be notified of the discharge, in accordance with State law, if soil is determined to have been impacted by a petroleum discharge. If related to a petroleum release, Ransom recommends that soils identified above the Industrial Use SCO be excavated, documented and disposed off-site, at an appropriately licensed receiving facility. If related to the historic fil materials, Ransom recommends proper soil management during construction activities (see recommendations below).

*REC 2D – Hydraulic Lift Control Boxes*

Soil analysis identified concentrations of PCBs, specifically aroclor 1260, and metals that exceeded the Unrestricted Use SCO at one soil sample (SB-14B) in the vicinity of the western-most hydraulic lift control box located within the Lot 30 Site Building. Ransom concludes that the identified concentrations of PCBs are most likely attributable to the hydraulic lift control box utilized during automotive repair/hydraulic lift operations; however, the metals impacts (i.e., copper and total mercury) are presumably related to the observed historic fill. Although the soil analytical results did not exceed the standards for the current and proposed land use (Commercial), Ransom recommends additional investigation due to the identified impacts within the proposed detention basin area. Specifically, Ransom recommends that if displaced during Site redevelopment activities, any displaced PCB impacts in soil be disposed of off-Site at an appropriately licensed receiving facility. Ransom also recommends the proper disposal of the three-identified hydraulic lift control box units in accordance with local, state, and federal regulations.

*REC 2E – Former Air Compressors and REC 11 – Vehicle Painting Operations*

Analytical sampling results identified concentrations of metals (specifically lead, total mercury, and zinc) that exceeded the Unrestricted Use SCO and the Protection of Ecological Resources SCO, and total chromium that exceeded the Unrestricted Use SCO for trivalent chromium and hexavalent chromium, the Residential Use SCO for hexavalent chromium, the Protection of Ecological Resources SCO for hexavalent chromium, and the Protection of Groundwater SCO for hexavalent chromium. Ransom's review of the data shows that the identified metals concentrations are comparable to the soil sampling results associated with the identified historic fill impacts on-Site (REC 9); therefore, it is more likely that fill materials below the building are the source of the metals concentrations. Further, although the identified metals concentrations exceed several NYSDEC SCOs, Ransom believes that these findings are not reportable to the NYSDEC since no known spill or release related to elevated metals concentrations was identified and concentrations do not exceed the standards for the current and proposed land use (Commercial). Based on these findings, Ransom concludes that no further action is warranted at this time provided the Site remains in Commercial use.

However, soil displaced during construction activities potentially containing elevated metals concentrations, and which will be disposed off-site, will require proper waste characterization testing and disposal at an appropriately licensed receiving facility.

**REC 3 – Vehicle Storage Operations**

Ransom did not identify areas of significant staining and/or evidence of impact associated with the vehicle storage operations; therefore, soil sampling was not completed at REC 3. Based on the lack of evidence of impact, Ransom does not recommend further investigation into the vehicle storage operations on-Site.

**REC 4 – Inactive Oil-Fired Burner**

Ransom was unable to complete subsurface soil investigation activities in the vicinity of the in-active oil-fired burner during the Phases II LSI activities due to the presence of underground utilities in this area. Although visual inspection of the surface conditions in the vicinity of the inactive oil-fired burner did not

identify breaches within the concrete slab, a significant layer of dust/potential waste ash was noted. Due to the likely presence of waste ash, which may contain heavy metals, Ransom recommends the proper removal and disposal of the inactive oil-fired burner in accordance with local, state, and federal regulations and cleaning of the dust/waste ash. Due to the inability to obtain analytical data and/or observe breaches to the floor slab beneath the inactive oil-fired burner, Ransom recommends the visual inspection of the floor slab after the slab is cleaned off and proper removal and disposal of the inactive oil-fired burner is completed. If a potential pathway to subsurface soils is identified, further investigation and/or action may be required.

**REC 5 – Former 3,000-gallon Fuel Oil UST**

Geophysical survey activities conducted on June 28, 2017 identified one subsurface metallic anomaly indicative of an UST in the presumed location of the former 3,000-gallon fuel oil UST, located on the northeast side of the Lot 30 Site Building, and appurtenant vent and product piping.

Subsequent soil sampling analysis did not identify concentrations of contaminants associated with fuel oil operations that exceeded the NYSDEC's most stringent SCOs. Based on the geophysical survey results and soil sampling analytical results completed as part of the subsurface investigation to evaluate potential impacts, Ransom concludes that gross impacts in connection with the UST are not present. However, it is possible that limited/residual impacts to the soil beneath and immediately surrounding the UST are possible. Prior to or concurrent with redevelopment, since the UST is within the footprint of the proposed CVS Pharmacy/Store, it should be properly removed and the immediately surrounding soil be assessed for evidence of a release (see Recommendations below).

**REC 6 – Former 550-gallon Waste Oil UST**

Geophysical survey activities conducted on June 28, 2017 did not identify a subsurface anomaly indicative of an UST in the presumed location of the former 550-gallon waste oil UST, located on the southeast exterior corner of the Lot 30 Site Building. Soil sampling analysis of soils collected at the presumed invert of the former 550-gallon waste oil UST identified concentrations of total chromium that exceeded the Unrestricted Use SCO for trivalent chromium and hexavalent chromium, the Residential Use SCO for hexavalent chromium, the Protection of Ecological Resources SCO for hexavalent chromium, and the Protection of Groundwater SCO for hexavalent chromium, and manganese that exceeded the Unrestricted Use SCO and the Protection of Ecological Resources SCO. Ransom's review of the data shows that the identified metals concentrations are not common constituents of concern for waste oil; therefore, it is more likely that fill materials used to backfill the UST grave are the source of these metals concentrations. Although the identified concentrations exceed various SCOs, Ransom believes that these findings are not reportable to the NYSDEC since no known spill or release of metals was identified and the concentrations do not exceed the standards for the current and proposed land use (Commercial). Based on these findings, Ransom concludes that no further action is warranted at this time provided the Site remains in Commercial use.

**REC 7 – 55-gallon Waste Oil Drum Storage**

Soil sampling analysis of subsurface soils collected beneath the former 55-gallon waste oil drum storage area identified metals concentrations (specifically lead and total mercury) that exceeded the Unrestricted Use SCO and the Protection of Ecological Resources SCO, and total chromium that exceeded the Unrestricted Use SCO and the Protection of Ecological Resources SCO for hexavalent chromium.

Ransom's review of the analytical data shows that the identified metals concentrations are comparable to the soil sampling results associated with the identified historic fill impacts on-Site (REC 9); therefore, it is more likely that fill materials below the building are the source of the metals concentrations and not the storage of 55-gallon waste oil drums. Although the identified concentrations exceed various SCOs, Ransom believes that these findings are not reportable to the NYSDEC since no known spill or release of metals was identified and the concentrations do not exceed the standards for the current and proposed land use (Commercial). Based on these findings, Ransom concludes that no further action is warranted at this time, provided the Site remains in Commercial Use.

**REC 8A – Known Fuel Oil Use at Residential Building**

Geophysical survey activities were conducted on June 28, 2017 on the Lot 30 portion of the Site; however, no evidence of an UST was identified. Soil analytical results identified concentrations of PAHs that exceeded the Unrestricted Use SCO, the Residential Use SCO, the Restricted Residential Use SCO, the Commercial Use SCO, and the Industrial Use SCO in the vicinity of the sealed fill pipe, presumably related to former fuel oil usage or possibly historic fill. Based on these findings, Ransom recommends further investigation with regard to the identified impacts. If related to a petroleum release, Ransom recommends the delineation and subsequent excavation/disposal of soils with concentrations that exceed the Commercial Use and Industrial Use SCO. If related to the historic fil materials, Ransom recommends proper soil management during construction activities (see recommendations below).

**REC 8B – Former Residential Use**

Between June 27, 2017 and June 29, 2017, Ransom conducted Site-wide geophysical survey activities to evaluate subsurface conditions for the presence of anomalies indicative of former structures, foundations, and/or previously unknown USTs. Geophysical survey results did not identify evidence of previously unknown USTs or septic systems at the Site; however, due to the limited nature of the geophysical survey, Ransom recognizes that they may be discovered during Site redevelopment activities. Therefore, Ransom recommends that in the case an underground heating oil tank and/or septic system is identified, they should be properly removed and disposed of in accordance with applicable local, state, and federal regulations. Ransom should be contacted immediately if evidence of impacts is identified in connection with a previously unidentified subsurface UST or septic system.

**REC 9 – Potential Fill**

During the course of the subsurface soil investigation activities, material indicative of historic fill, particularly the presence of red brick, was identified at depths ranging from 0.5 to 3.0 feet bgs within soil borings SB-14, SB-21, SB-22, and SB-24. Analysis of the soils in the vicinity of the historic fill identified concentrations of VOCs, metals, and pesticides that exceeded the most stringent NYSDEC SCOs, including four metals (arsenic, barium, copper, and lead) that exceeded the Commercial Use SCOs and/or the Industrial Use SCOs. Based on these findings, Ransom recommends further response actions with regards to the identified historic fill on-Site (i.e., engineering controls and a long-term Soil Management Plan for implementation during future subsurface work at the Site). Ransom understands that exceedances of the Commercial Use SCOs and/or the Industrial Use SCOs related to historic fill exist within the proposed building footprint and proposed detention basin area. Ransom notes that the fill material can be reused on-Site provided that it is being reused within other areas containing the identified historic fill. If off-site disposal is required, Ransom recommends that the fill material be characterized

and disposed of in accordance with applicable local, state, and federal regulations as well as accepting facility policies.

**REC 10 – Potential Off-Site Sources**

Groundwater sampling analytical results identified concentrations of VOCs, SVOCs, and lead that exceeded the NYSDEC AWQS for groundwater collected from temporary well points TWP-1 and TWP-2. Elevated concentrations indicative of gasoline impacts were identified within groundwater from both temporary well points. Based on these findings, Ransom concludes that off-Site sources of contamination have impacted/are impacting the groundwater conditions on-Site.

New York State does not have Vapor Intrusion (VI) groundwater screening levels developed for groundwater to evaluate for potential vapor concerns within structures. In the absence of these screening levels, Ransom compared the groundwater results to the New Jersey Department of Environmental Protection (NJDEP) VI Groundwater Screening Levels (GWSL) for those compounds that exceeded the NYSDEC AWQS in an effort to evaluate potential vapor intrusion into the proposed CVS building. The results of the comparison identified several compounds with concentrations identified in groundwater from TWP-1 and TWP-2 that exceeded the applicable NJDEP VI GWSLs. The locations of these two temporary well points are proximate to the proposed CVS building and represent a potential vapor intrusion concern. Ransom recommends the installation of a passive sub-slab mitigation system concurrent with future Site redevelopment activities.

However, groundwater displaced during construction activities, potentially containing elevated VOCs, SVOCs, and lead concentrations, will require proper management (e.g. treatment and discharge permit, or containment and disposal at an appropriately licensed receiving facility).

**Preliminary Waste Characterization**

Soil sampling analysis identified metals concentrations, including total chromium, lead, total mercury, and zinc, that exceeded the NYSDEC's most stringent SCOs, including the Unrestricted Use SCO, the Protection of Ecological Resources SCO, the Protection of Groundwater Use SCO, the Residential Use SCO, and/or the Restricted Residential Use SCO within the composite soil sample collected within the footprint of the proposed detention basin. Ransom's review of the data shows that the identified metals concentrations are likely associated with the identified historic fill impacts on-Site (REC 9), see above. For soil management purposes, any soil displaced during construction activities potentially containing elevated metals concentrations, and which will be disposed off-site, will require proper waste characterization testing and disposal at an appropriately licensed receiving facility.

<u>Recommendations</u>

Based on the findings and conclusions presented above, Ransom makes the following recommendations:

- Based on the investigative results, Ransom does not recommend further investigation of REC 1, REC 2C, REC 2E, REC 3, REC 5, REC 6 or REC 11.
- Ransom recommends the proper removal and disposal of the three-identified hydraulic lift control box units, hydraulically operated lifts, and associated hydraulic oil containment

systems within the Lot 30 Site Building according to local, state and federal regulations prior to or concurrent with Site redevelopment activities.

- Due to the identified PCB impacts within the proposed detention basin (REC 2D), Ransom recommends that, if displaced during Site redevelopment activities, any displaced PCB impacts in soil be disposed of off-Site, at an appropriately licensed receiving facility.
- Due to the likely presence of waste ash, which may contain heavy metals, Ransom recommends the proper removal and disposal of the inactive oil-fired burner (REC 4) in accordance with local, state, and federal regulations.
- Ransom recommends the visual inspection of the floor slab in the vicinity of the inactive oil-fired burner (REC 4) after cleaning and removal of the burner to evaluate potential impacts in this area.
- Ransom recommends that the suspect UST (REC 5) identified during the June 28, 2017 geophysical survey activities be properly removed and disposed off-site prior to, or concurrent with, redevelopment activities in accordance with applicable federal, state and local regulations. Although soil samples surrounding the UST did not exhibit impacts, the area beneath the UST could not be sampled due to the presence of the UST itself. If soils are observed as being impacted and/or soil analytical results indicate a release to Site soils, appropriate remedial action(s) should be taken, including but not limited to, notification to the NYSDEC, soil excavation, post-remediation soil sampling, groundwater investigation, and required reporting activities. If impacts above the NYSDEC's SCOs are further identified, further remedial action (e.g., soil removal, disposal, reporting, etc.) may be warranted.
- The 55-gallon drums (REC 7) present on-Site should be removed from the Site and properly disposed of prior to Site construction activities, and documentation of their disposal should be maintained with a copy provided to CVS.
- Soil analytical results identified elevated concentrations of PAHs in the vicinity of a sealed fill pipe on the eastern exterior of the Lot 26 Site Building (REC 8A) and the wall-mounted hydraulic fluid reservoir piping associated with the hydraulic lift system within Bay 4 of the Lot 30 Site Building (REC 2B). Ransom recommends further investigation of REC 2B and REC 8A prior to notification to the NYSDEC for these identified impacts in an effort to determine if they are related to a petroleum discharge, or historic fill. If determined to be the result of a petroleum discharge, Ransom recommends the delineation, excavation and disposal of soils with concentrations that exceed the Commercial Use and/or Industrial Use SCOs prior to or concurrent with the Site redevelopment activities that were identified in conjunction with the known fuel oil use at the Lot 26 Site Building (REC 8A) and hydraulic oil at the Lot 30 Site Building (REC 2B). However, if related to historic fill, Ransom recommends proper soil management activities. Specifically, if displaced during construction, reuse on-Site at other historic fill areas is appropriate, as historic fill was observed across the Site from grade to at least three feet below grade; however, if the material is geotechnically unsuitable or it is determined to be excess, the impacted soils should be properly characterized and disposed of at an appropriately licensed facility.
- It is Ransom's opinion that the identified metals exceedances of the Commercial Use SCOs and/or the Industrial Use SCOs (i.e., arsenic, barium, copper, and lead) are related to historic fill materials. Based on these findings and since fill materials were identified across the Site,

Ransom recommends further response actions. Although not necessarily a reportable condition to the NYSDEC, Ransom recommends implementing engineering controls and a long-term Soil Management Plan, where the engineering controls will include construction of the proposed Site building, parking lot/drives and other construction features that will serve as a cap for the contaminated fill (i.e., asphalt paving, landscaping, concrete sidewalk, and building slab). The contaminated fill may remain on-Site or be reused on-Site provided that they are geotechnically suitable and the engineering controls are carried out.

- Ransom recommends that fill material displaced during Site redevelopment activities, which cannot be reused on-Site, be properly tested and managed for off-site beneficial reuse and/or tested for waste characterization parameters and disposed of in accordance with applicable local, state, and federal regulations, as well as accepting facility policies.

- It is Ransom's opinion that the identified VOCs, SVOCs, and lead impacts in groundwater (REC 10) are likely a result of off-Site sources of contamination, and likely not attributable to current and/or former on-Site automotive service operations. Groundwater was encountered during Phase II LSI activities at approximately 8 feet bgs. Based on the identified groundwater impacts, Ransom recommends the implementation of a Groundwater Management Plan (GMP) in the event that Site redevelopment activities extend beyond approximately 7 feet bgs.

- Based on the identified VOC groundwater impacts, likely attributable to off-Site groundwater impacts (REC 10), Ransom recommends the installation of a passive sub-slab vapor mitigation system concurrent with future Site redevelopment activities.

- Due to the identified PAHs and metals on-Site, Ransom recommends that a Soil Management Plan (SMP) be developed to properly manage soils displaced during remediation activities, demolition, and/or Site redevelopment activities that will be exported from the Site.

- Although no indication of a septic system(s) or other suspect UST(s) was identified, they may be discovered during Site redevelopment due to the geophysical survey limitations. Therefore, Ransom recommends that, in the case an underground tank and/or a septic tank is identified, they should be properly removed and disposed of in accordance with applicable federal, state and local regulations.

- Based on the identified exceedances of the Unrestricted and Residential Use SCOs, soils planned for export will require additional waste characterization testing, depending on the requirements of the receiving site or facility. The limited nature of our Phase II LSI, and the associated analytical testing, does not authorize exported soils being used for unrestricted reuse; therefore, exported soils are not considered to be certified clean fill material at this time.

- All on-Site drainage structures, including septic system components and storm water drainage structures (catch basins, dry wells, etc.), that will not be reused as part of the Site redevelopment should be properly decommissioned in accordance with applicable regulations.

If you have any questions regarding this letter report, please do not hesitate to call.

Sincerely,
RANSOM CONSULTING, INC.

Lauren Rojewski
Environmental Scientist

Kimberly Skibo
Project Manager



Brian R. Pettingill, P.G.
Senior Project Manager/CVS Program Manager

Attachments

**TABLES**

Table 1 – Soil Sampling Analytical Results
Table 2 – Groundwater Sampling Analytical Results

Phase II Limited Subsurface Investigation
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

# TABLE 1
## Soil Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-1 | | | SB-2 | | | SB-3 | | | SB-6A | | | SB-6B | | | SB-7 | | | SB-8A | | | SB-8B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-009 | | | AC98737-001 | | | AC98711-005 | | | AC98737-002 | | | AC98737-003 | | | AC98694-001 | | | AC98694-002 | | | AC98694-003 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 3.0-3.5 | | | 0.5-1.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.68 | 100 | 100 | 500 | 1,000 | - | 0.68 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.002 |
| 1,1,2,2-Tetrachloroethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.002 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,1,2-Trichloroethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,1-Dichloroethane | 0.27 | 19 | 26 | 240 | 480 | - | 0.27 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,1-Dichloroethene | 0.33 | 100 | 100 | 500 | 1,000 | - | 0.33 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,2,3-Trichlorobenzene | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,2,4-Trichlorobenzene | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,2,4-Trimethylbenzene | 3.6 | 47 | 52 | 190 | 380 | - | 3.6 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| 1,2-Dibromo-3-chloropropane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,2-Dibromoethane | - | - | - | - | - | - | - | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| 1,2-Dichlorobenzene | 1.10 | 100 | 100 | 500 | 1,000 | - | 1.1 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,2-Dichloroethane | 0.02 | 2.3 | 3.1 | 30 | 60 | 10 | 0.02 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,2-Dichloropropane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,3,5-Trimethylbenzene | 8.4 | 47 | 52 | 190 | 380 | - | 8.4 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| 1,3-Dichlorobenzene | 2.4 | 17 | 49 | 280 | 560 | - | 0.19 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,4-Dichlorobenzene | 1.8 | 9.8 | 13 | 130 | 250 | 20 | 1.8 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,4-Dioxane | 0.1 | 9.8 | 13 | 130 | 250 | 0.1 | 0.1 | | U | 0.12 | | U | 0.12 | | U | 0.11 | | U | 0.12 | | U | 0.11 | | U | 0.11 | | U | 0.12 | | U | 0.10 |
| 2-Butanone | 0.12 | 100 | 100 | 500 | 1,000 | 100 | 0.12 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 2-Hexanone | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 4-Isopropyltoluene | - | - | - | - | - | - | - | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| 4-Methyl-2-pentanone | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Acetone | 0.05 | 100 | 100 | 500 | 1,000 | 2.2 | 0.05 | | U | 0.012 | | U | 0.012 | | U | 0.011 | | U | 0.012 | | U | 0.011 | | U | 0.011 | | U | 0.012 | | U | 0.010 |
| Benzene | 0.06 | 2.9 | 4.8 | 44 | 89 | 70 | 0.06 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| Bromochloromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Bromodichloromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Bromoform | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Bromomethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Carbon disulfide | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Carbon tetrachloride | 0.76 | 1.4 | 2.4 | 22 | 44 | - | 0.76 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Chlorobenzene | 1.1 | 100 | 100 | 500 | 1,000 | 40 | 1.1 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Chloroethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Chloroform | 0.37 | 10 | 49 | 350 | 700 | 12 | 0.37 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Chloromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| cis-1,2-Dichloroethene | 0.25 | 59 | 100 | 500 | 1,000 | - | 0.25 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| cis-1,3-Dichloropropene | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Cyclohexane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Dibromochloromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Dichlorodifluoromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Ethylbenzene | 1 | 30 | 41 | 390 | 780 | - | 1 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| Isopropylbenzene | - | - | - | - | - | - | - | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| m&p-Xylenes | - | - | - | - | - | - | - | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| Methyl Acetate | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Methylcyclohexane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Methylene chloride | 0.05 | 51 | 100 | 500 | 1,000 | 12 | 0.05 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Methyl-t-butyl ether | 0.93 | 62 | 100 | 500 | 1,000 | - | 0.93 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| n-Butylbenzene | 12 | - | - | - | - | - | - | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| n-Propylbenzene | 3.9 | 100 | 100 | 500 | 1,000 | - | 3.9 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| o-Xylene | - | - | - | - | - | - | - | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| sec-Butylbenzene | 11 | 100 | 100 | 500 | 1,000 | - | 11 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| Styrene | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| t-Butylbenzene | 5.9 | 100 | 100 | 500 | 1,000 | - | 5.9 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |

# TABLE 1
## Soil Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-1 | | | SB-2 | | | SB-3 | | | SB-6A | | | SB-6B | | | SB-7 | | | SB-8A | | | SB-8B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-009 | | | AC98737-001 | | | AC98711-005 | | | AC98737-002 | | | AC98737-003 | | | AC98694-001 | | | AC98694-002 | | | AC98694-003 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 3.0-3.5 | | | 0.5-1.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 1.3 | 5.5 | 19 | 150 | 300 | 2 | 1.3 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Toluene | 0.7 | 100 | 100 | 500 | 1,000 | 36 | 0.7 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| trans-1,2-Dichloroethene | 0.19 | 100 | 100 | 500 | 1,000 | - | 0.19 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| trans-1,3-Dichloropropene | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Trichloroethene | 0.47 | 10 | 21 | 200 | 400 | 2 | 0.47 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Trichlorofluoromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Vinyl chloride | 0.02 | 0.21 | 0.90 | 13 | 27 | - | 0.02 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Xylenes (Total) | 0.26 | 100 | 100 | 500 | 1,000 | 0.26 | 1.6 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| Total VOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| **Semi-Volatile Organic Compounds (SVOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1'-Biphenyl | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 1,2,4,5-Tetrachlorobenzene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,3,4,6-Tetrachlorophenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4,5-Trichlorophenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4,6-Trichlorophenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dichlorophenol | - | - | - | - | - | - | - | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dimethylphenol | - | - | - | - | - | - | - | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dinitrophenol | - | - | - | - | - | - | - | | U | 0.19 | | U | 0.19 | | U | 0.2 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dinitrotoluene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,6-Dinitrotoluene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Chloronaphthalene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Chlorophenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Methylnaphthalene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.04 | | U | 0.038 | | U | 0.038 | | U | 0.039 |
| 2-Methylphenol | 0.33 | 100 | 100 | 500 | 1000 | - | 0.33 | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Nitroaniline | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Nitrophenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 3&4-Methylphenol | 34* | 34* | 100 | 500 | 1000 | - | 0.33 | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 3,3'-Dichlorobenzidine | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 3-Nitroaniline | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4,6-Dinitro-2-methylphenol | - | - | - | - | - | - | - | | U | 0.19 | | U | 0.19 | | U | 0.2 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Bromophenyl-phenylether | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Chloro-3-methylphenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Chloroaniline | - | - | - | - | - | - | - | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Chlorophenyl-phenylether | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Nitroaniline | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Nitrophenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Acenaphthene | 20 | 100 | 100 | 500 | 1000 | 20 | 98 | | U | 0.038 | | U | 0.038 | | U | 0.039 | 0.057 | | 0.039 | | U | 0.04 | | U | 0.038 | | U | 0.038 | | U | 0.039 |
| Acenaphthylene | 100 | 100 | 100 | 500 | 1000 | - | 107 | 0.051 | | 0.038 | 0.048 | | 0.038 | | U | 0.039 | 0.079 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.049 | | 0.038 | | U | 0.039 |
| Acetophenone | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Anthracene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 0.1 | | 0.038 | 0.07 | | 0.038 | | U | 0.039 | 0.15 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.097 | | 0.038 | | U | 0.039 |
| Atrazine | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Benzaldehyde | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Benzo[a]anthracene | 1 | 1 | 1 | 5.6 | 11 | - | 1 | 0.6 | | 0.038 | 0.44 | | 0.038 | | U | 0.039 | 0.63 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.52 | | 0.038 | | U | 0.039 |
| Benzo[a]pyrene | 1 | 1 | 1 | 1 | 1.1 | 2.6 | 22 | 0.5 | | 0.038 | 0.45 | | 0.038 | | U | 0.039 | 0.68 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.5 | | 0.038 | | U | 0.039 |
| Benzo[b]fluoranthene | 1 | 1 | 1 | 5.6 | 11 | - | 1.7 | 0.73 | | 0.038 | 0.59 | | 0.038 | | U | 0.039 | 1 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.7 | | 0.038 | | U | 0.039 |
| Benzo[g,h,i]perylene | 100 | 100 | 100 | 500 | 1000 | - | 1.7 | 0.31 | | 0.038 | 0.33 | | 0.038 | | U | 0.039 | 0.5 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.33 | | 0.038 | | U | 0.039 |
| Benzo[k]fluoranthene | 0.8 | 1 | 3.9 | 56 | 100 | - | 1.7 | 0.26 | | 0.038 | 0.21 | | 0.038 | | U | 0.039 | 0.29 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.18 | | 0.038 | | U | 0.039 |
| bis(2-Chloroethoxy)methane | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| bis(2-Chloroethyl)ether | - | - | - | - | - | - | - | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| bis(2-Chloroisopropyl)ether | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| bis(2-Ethylhexyl)phthalate | - | - | - | - | - | - | - | 0.083 | | 0.038 | 0.042 | | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Butylbenzylphthalate | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-1 | | | SB-2 | | | SB-3 | | | SB-6A | | | SB-6B | | | SB-7 | | | SB-8A | | | SB-8B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-009 | | | AC98737-001 | | | AC98711-005 | | | AC98737-002 | | | AC98737-003 | | | AC98694-001 | | | AC98694-002 | | | AC98694-003 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 3.0-3.5 | | | 0.5-1.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Semi-Volatile Organic Compounds (SVOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Caprolactam | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Carbazole | - | - | - | - | - | - | - | 0.058 | | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Chrysene | 1 | 1 | 3.9 | 56 | 110 | - | 1 | 0.61 | | 0.038 | 0.43 | | 0.038 | | U | 0.039 | 0.77 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.53 | | 0.038 | | U | 0.039 |
| Dibenzo[a,h]anthracene | 0.33 | 0.33 | 0.33 | 0.56 | 1.1 | - | 1000 | 0.12 | | 0.038 | 0.11 | | 0.038 | | U | 0.039 | 0.17 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.12 | | 0.038 | | U | 0.039 |
| Dibenzofuran | - | - | - | - | - | - | - | 0.014 | | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Diethylphthalate | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Dimethylphthalate | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Di-n-butylphthalate | - | - | - | - | - | - | - | 0.02 | | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Di-n-octylphthalate | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Fluoranthene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 1.1 | | 0.038 | 0.74 | | 0.038 | | U | 0.039 | 1.3 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.85 | | 0.038 | | U | 0.039 |
| Fluorene | 30 | 100 | 100 | 500 | 1000 | 30 | 386 | | U | 0.038 | | U | 0.038 | | U | 0.039 | 0.053 | | 0.039 | | U | 0.04 | | U | 0.038 | | U | 0.038 | | U | 0.039 |
| Hexachlorobenzene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Hexachlorobutadiene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Hexachlorocyclopentadiene | - | - | - | - | - | - | - | | U | 0.089 | | U | 0.09 | | U | 0.092 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Hexachloroethane | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Indeno[1,2,3-cd]pyrene | 0.5 | 0.5 | 0.5 | 5.6 | 11 | - | 8.2 | 0.3 | | 0.038 | 0.28 | | 0.038 | | U | 0.039 | 0.47 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.29 | | 0.038 | | U | 0.039 |
| Isophorone | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Naphthalene | 12 | 100 | 100 | 500 | 1000 | - | 12 | 0.014 | | 0.0095 | | U | 0.0096 | | U | 0.0098 | 0.021 | | 0.0098 | | U | 0.0099 | | U | 0.0096 | 0.013 | | 0.0096 | | U | 0.0098 |
| Nitrobenzene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| N-Nitroso-di-n-propylamine | - | - | - | - | - | - | - | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| N-Nitrosodiphenylamine | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Pentachlorophenol | 0.8 | 100 | 100 | 500 | 1000 | - | 1000 | | U | 0.19 | | U | 0.19 | | U | 0.2 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Phenanthrene | 100 | 100 | 100 | 50 | 1000 | - | 1000 | 0.47 | | 0.038 | 0.28 | | 0.038 | | U | 0.039 | 0.86 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.39 | | 0.038 | | U | 0.039 |
| Phenol | 0.33 | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Pyrene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 1.1 | | 0.038 | 0.77 | | 0.038 | | U | 0.039 | 1.3 | | 0.039 | | U | 0.04 | | U | 0.038 | 1 | | 0.038 | | U | 0.039 |
| Total SVOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

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Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
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| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-1 | | | SB-2 | | | SB-3 | | | SB-6A | | | SB-6B | | | SB-7 | | | SB-8A | | | SB-8B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-009 | | | AC98737-001 | | | AC98711-005 | | | AC98737-002 | | | AC98737-003 | | | AC98694-001 | | | AC98694-002 | | | AC98694-003 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 3.0-3.5 | | | 0.5-1.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Metals** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | - | - | - | - | - | - | - | 9,600 | | 230 | 11,000 | | 230 | 10,000 | | 240 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Antimony | - | - | - | - | - | - | - | | U | 0.91 | | U | 0.92 | | U | 0.94 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Arsenic | 13 | 16 | 16 | 16 | 16 | 13 | 16 | 5.3 | | 0.23 | 6.6 | | 0.23 | 1.7 | | 0.24 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Barium | 350 | 350 | 400 | 400 | 10,000 | 433 | 820 | ***360*** | | 11 | 160 | | 11 | 76 | | 12 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Beryllium | 7.2 | 14 | 72 | 590 | 2,700 | 10 | 47 | 0.33 | | 0.23 | 0.44 | | 0.23 | 0.33 | | 0.24 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Cadmium | 2.5 | 2.5 | 4.3 | 9.3 | 60 | 4 | 7.5 | 1.9 | | 0.45 | 1.2 | | 0.46 | | U | 0.47 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Calcium | - | - | - | - | - | - | - | 24,000 | | 1,100 | 8,300 | | 1,100 | 1,500 | | 1,200 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Total Chromium* | 30/1 | 36/22 | 180/110 | 1,500/400 | 6,800/800 | 41/1 | -/19 | **78** | | 5.7 | **23** | | 5.7 | ***17*** | | 5.9 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Cobalt | - | - | - | - | - | - | - | 8.2 | | 2.8 | 7.7 | | 2.9 | 5.4 | | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Copper | 50 | 270 | 270 | 270 | 10,000 | 50 | 1,720 | ***69*** | | 5.7 | ***61*** | | 5.7 | 13 | | 5.9 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Iron | - | - | - | - | - | - | - | 22,000 | | 230 | 19,000 | | 230 | 15,000 | | 240 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Lead | 63 | 400 | 400 | 1,000 | 3,900 | 63 | 450 | **620** | | 5.7 | **520** | | 5.7 | 63 | | 5.9 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Magnesium | - | - | - | - | - | - | - | 6,200 | | 570 | 4,300 | | 570 | 2,500 | | 590 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Manganese | 1,600 | 2,000 | 2,000 | 10,000 | 10,000 | 1,600 | 2,000 | 330 | | 11 | 360 | | 11 | 290 | | 12 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Total Mercury | 0.18 | 0.81 | 0.81 | 2.8 | 5.7 | 0.18 | 0.73 | ***0.8*** | | 0.095 | **1.9** | | 0.096 | 0.13 | | 0.098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Nickel | 30 | 140 | 310 | 310 | 10,000 | 30 | 130 | 25 | | 5.7 | 18 | | 5.7 | 13 | | 5.9 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Potassium | - | - | - | - | - | - | - | 1,200 | | 570 | 940 | | 570 | 650 | | 590 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Selenium | 3.9 | 36 | 180 | 1,500 | 6,800 | 3.9 | 4 | | U | 2.3 | | U | 2.3 | | U | 2.4 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Silver | 2 | 36 | 180 | 1,500 | 6,800 | 2 | 8.3 | | U | 0.23 | | U | 0.23 | | U | 0.24 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Sodium | - | - | - | - | - | - | - | | U | 280 | 440 | | 290 | | U | 290 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Thallium | - | - | - | - | - | - | - | | U | 0.45 | | U | 0.46 | | U | 0.47 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Vanadium | - | - | - | - | - | - | - | 42 | | 11 | 24 | | 11 | 15 | | 12 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Zinc | 109 | 3,300 | 10,000 | 10,000 | 10,000 | 109 | 2,480 | ***410*** | | 11 | ***300*** | | 11 | 62 | | 12 | NA | | | NA | | | NA | | | NA | | | NA | | |
| **Pesticides** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a-Chlordane | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Aldrin | 0.01 | 0.02 | 0.10 | 0.68 | 1.40 | 0.14 | 0.19 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Alpha-BHC | 0.02 | 0.10 | 0.48 | 3.40 | 6.80 | 0.04 | 0.02 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| beta-BHC | 0.04 | 0.07 | 0.36 | 3 | 14 | 0.6 | 0.09 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Chlordane (Total) | 0.09 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| delta-BHC | 0.04 | 100 | 100 | 500 | 1,000 | 0.04 | 0.25 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Dieldrin | 0.01 | 0.04 | 0.2 | 1.40 | 2.8 | 0.01 | 0.1 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan I | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan II | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan Sulfate | 2.4 | 4.8 | 24 | 200 | 920 | - | 1,000 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin | 0.01 | 2.2 | 11 | 89 | 410 | 0.01 | 0.06 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin Aldehyde | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin Ketone | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| gamma-BHC | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Heptachlor | 0.04 | 0.42 | 2.1 | 15 | 29 | 0.14 | 0.38 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Heptachlor Epoxide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Methoxychlor | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDD | 0.0033 | 2.6 | 13 | 92 | 180 | 0.0033 | 14 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDE | 0.0033 | 1.8 | 8.9 | 62 | 120 | 0.0033 | 17 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDT | 0.0033 | 1.7 | 7.9 | 47 | 94 | 0.0033 | 136 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Toxaphene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| y-Chlordane | 0.094 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

# TABLE 1
## Soil Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-1 | | | SB-2 | | | SB-3 | | | SB-6A | | | SB-6B | | | SB-7 | | | SB-8A | | | SB-8B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-009 | | | AC98737-001 | | | AC98711-005 | | | AC98737-002 | | | AC98737-003 | | | AC98694-001 | | | AC98694-002 | | | AC98694-003 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 3.0-3.5 | | | 0.5-1.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Polychlroinated Biphenyls (PCBs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aroclor (Total) | 0.1 | 1 | 1 | 1 | 25 | 1 | 3.2 | 0.05 | | 0.028 | U | | 0.029 | U | | 0.029 | 0.059 | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1016 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1221 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1232 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1242 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1248 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1254 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1260 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1262 | - | - | - | - | - | - | - | 0.05 | | 0.028 | U | | 0.029 | U | | 0.029 | 0.059 | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1268 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| **Additional Analysis** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

**Notes:**

Q = Data Qualifier
U = Not Detected
NA = Not Analyzed
J = Estimated Value
RL = Reporting Limit
All concentrations are in milligrams per kilogram (mg/kg)
**140** = concentration exceeds Protection of Groundwater Soil Cleanup Objective
***140*** = concentration exceeds Unrestricted Use Soil Cleanup Objective
**10** = reporting limit exceeds most stringent Soil Cleanup Objective
* = The SCOs listed for Total Chromium are the trivalent chromium SCOs and hexavalent chromium SCOs, respectively, as total chromium does not have an established SCO.

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-9A | | | SB-9B | | | SB-10 | | | SB-11 A | | | SB-11 B | | | SB-12 | | | SB-13A | | | SB-13B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-005 | | | AC98694-006 | | | AC98694-008 | | | AC98711-006 | | | AC98711-007 | | | AC98694-010 | | | AC98694-011 | | | AC98694-012 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.0-8.5 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.68 | 100 | 100 | 500 | 1,000 | - | 0.68 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,1,2,2-Tetrachloroethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,1,2-Trichloroethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,1-Dichloroethane | 0.27 | 19 | 26 | 240 | 480 | - | 0.27 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,1-Dichloroethene | 0.33 | 100 | 100 | 500 | 1,000 | - | 0.33 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,2,3-Trichlorobenzene | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,2,4-Trichlorobenzene | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,2,4-Trimethylbenzene | 3.6 | 47 | 52 | 190 | 380 | - | 3.6 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| 1,2-Dibromo-3-chloropropane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,2-Dibromoethane | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| 1,2-Dichlorobenzene | 1.10 | 100 | 100 | 500 | 1,000 | - | 1.1 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,2-Dichloroethane | 0.02 | 2.3 | 3.1 | 30 | 60 | 10 | 0.02 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,2-Dichloropropane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,3,5-Trimethylbenzene | 8.4 | 47 | 52 | 190 | 380 | - | 8.4 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| 1,3-Dichlorobenzene | 2.4 | 17 | 49 | 280 | 560 | - | 0.19 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,4-Dichlorobenzene | 1.8 | 9.8 | 13 | 130 | 250 | 20 | 1.8 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,4-Dioxane | 0.1 | 9.8 | 13 | 130 | 250 | 0.1 | 0.1 | U | 0.13 | | U | 0.11 | | U | 0.11 | | U | 0.13 | | U | 0.12 | | U | 0.12 | | U | 0.12 | | U | 0.099 | |
| 2-Butanone | 0.12 | 100 | 100 | 500 | 1,000 | 100 | 0.12 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 2-Hexanone | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 4-Isopropyltoluene | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| 4-Methyl-2-pentanone | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Acetone | 0.05 | 100 | 100 | 500 | 1,000 | 2.2 | 0.05 | U | 0.013 | | U | 0.011 | | U | 0.011 | | U | 0.013 | | U | 0.012 | | U | 0.012 | | U | 0.012 | | U | 0.0099 | |
| Benzene | 0.06 | 2.9 | 4.8 | 44 | 89 | 70 | 0.06 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| Bromochloromethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Bromodichloromethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Bromoform | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Bromomethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Carbon disulfide | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Carbon tetrachloride | 0.76 | 1.4 | 2.4 | 22 | 44 | - | 0.76 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Chlorobenzene | 1.1 | 100 | 100 | 500 | 1,000 | 40 | 1.1 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Chloroethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Chloroform | 0.37 | 10 | 49 | 350 | 700 | 12 | 0.37 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Chloromethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| cis-1,2-Dichloroethene | 0.25 | 59 | 100 | 500 | 1,000 | - | 0.25 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| cis-1,3-Dichloropropene | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Cyclohexane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Dibromochloromethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Dichlorodifluoromethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Ethylbenzene | 1 | 30 | 41 | 390 | 780 | - | 1 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| Isopropylbenzene | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| m&p-Xylenes | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| Methyl Acetate | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Methylcyclohexane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Methylene chloride | 0.05 | 51 | 100 | 500 | 1,000 | 12 | 0.05 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Methyl-t-butyl ether | 0.93 | 62 | 100 | 500 | 1,000 | - | 0.93 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| n-Butylbenzene | 12 | - | - | - | - | - | - | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| n-Propylbenzene | 3.9 | 100 | 100 | 500 | 1,000 | - | 3.9 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| o-Xylene | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| sec-Butylbenzene | 11 | 100 | 100 | 500 | 1,000 | - | 11 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| Styrene | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| t-Butylbenzene | 5.9 | 100 | 100 | 500 | 1,000 | - | 5.9 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-9A | | | SB-9B | | | SB-10 | | | SB-11 A | | | SB-11 B | | | SB-12 | | | SB-13A | | | SB-13B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-005 | | | AC98694-006 | | | AC98694-008 | | | AC98711-006 | | | AC98711-007 | | | AC98694-010 | | | AC98694-011 | | | AC98694-012 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.0-8.5 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 1.3 | 5.5 | 19 | 150 | 300 | 2 | 1.3 | | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 |
| Toluene | 0.7 | 100 | 100 | 500 | 1,000 | 36 | 0.7 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 |
| trans-1,2-Dichloroethene | 0.19 | 100 | 100 | 500 | 1,000 | - | 0.19 | | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 |
| trans-1,3-Dichloropropene | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 |
| Trichloroethene | 0.47 | 10 | 21 | 200 | 400 | 2 | 0.47 | | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 |
| Trichlorofluoromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 |
| Vinyl chloride | 0.02 | 0.21 | 0.90 | 13 | 27 | - | 0.02 | | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 |
| Xylenes (Total) | 0.26 | 100 | 100 | 500 | 1,000 | 0.26 | 1.6 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 |
| Total VOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| **Semi-Volatile Organic Compounds (SVOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1'-Biphenyl | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 1,2,4,5-Tetrachlorobenzene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,3,4,6-Tetrachlorophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4,5-Trichlorophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4,6-Trichlorophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dichlorophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dimethylphenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dinitrophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dinitrotoluene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,6-Dinitrotoluene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Chloronaphthalene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Chlorophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Methylnaphthalene | - | - | - | - | - | - | - | | U | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.042 | | U | 0.039 |
| 2-Methylphenol | 0.33 | 100 | 100 | 500 | 1000 | - | 0.33 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Nitroaniline | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Nitrophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 3&4-Methylphenol | 34* | 34* | 100 | 500 | 1000 | - | 0.33 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 3,3'-Dichlorobenzidine | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 3-Nitroaniline | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4,6-Dinitro-2-methylphenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Bromophenyl-phenylether | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Chloro-3-methylphenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Chloroaniline | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Chlorophenyl-phenylether | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Nitroaniline | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Nitrophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Acenaphthene | 20 | 100 | 100 | 500 | 1000 | 20 | 98 | | U | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.042 | | U | 0.039 |
| Acenaphthylene | 100 | 100 | 100 | 500 | 1000 | - | 107 | 0.06 | | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.042 | | U | 0.039 |
| Acetophenone | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Anthracene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 0.22 | | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.042 | | U | 0.039 |
| Atrazine | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Benzaldehyde | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Benzo[a]anthracene | 1 | 1 | 1 | 5.6 | 11 | - | 1 | 1.3 | | 0.039 | | U | 0.039 | | U | 0.039 | 0.042 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.091 | | 0.042 | | U | 0.039 |
| Benzo[a]pyrene | 1 | 1 | 1 | 1 | 1.1 | 2.6 | 22 | ***1.2*** | | 0.039 | | U | 0.039 | | U | 0.039 | 0.043 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.092 | | 0.042 | | U | 0.039 |
| Benzo[b]fluoranthene | 1 | 1 | 1 | 5.6 | 11 | - | 1.7 | ***1.7*** | | 0.039 | | U | 0.039 | | U | 0.039 | 0.056 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.14 | | 0.042 | | U | 0.039 |
| Benzo[g,h,i]perylene | 100 | 100 | 100 | 500 | 1000 | - | 1.7 | 0.75 | | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | 0.068 | | 0.042 | | U | 0.039 |
| Benzo[k]fluoranthene | 0.8 | 1 | 3.9 | 56 | 100 | - | 1.7 | 0.43 | | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | 0.051 | | 0.042 | | U | 0.039 |
| bis(2-Chloroethoxy)methane | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| bis(2-Chloroethyl)ether | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| bis(2-Chloroisopropyl)ether | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| bis(2-Ethylhexyl)phthalate | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Butylbenzylphthalate | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-9A | | | SB-9B | | | SB-10 | | | SB-11 A | | | SB-11 B | | | SB-12 | | | SB-13A | | | SB-13B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-005 | | | AC98694-006 | | | AC98694-008 | | | AC98711-006 | | | AC98711-007 | | | AC98694-010 | | | AC98694-011 | | | AC98694-012 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.0-8.5 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Semi-Volatile Organic Compounds (SVOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Caprolactam | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Carbazole | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Chrysene | 1 | 1 | 3.9 | 56 | 110 | - | 1 | 1.2 | | 0.039 | | U | 0.039 | | U | 0.039 | 0.044 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.11 | | 0.042 | | U | 0.039 |
| Dibenzo[a,h]anthracene | 0.33 | 0.33 | 0.33 | 0.56 | 1.1 | - | 1000 | 0.27 | | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.042 | | U | 0.039 |
| Dibenzofuran | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Diethylphthalate | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Dimethylphthalate | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Di-n-butylphthalate | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Di-n-octylphthalate | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Fluoranthene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 2.6 | | 0.039 | | U | 0.039 | | U | 0.039 | 0.075 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.18 | | 0.042 | | U | 0.039 |
| Fluorene | 30 | 100 | 100 | 500 | 1000 | 30 | 386 | | U | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.042 | | U | 0.039 |
| Hexachlorobenzene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Hexachlorobutadiene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Hexachlorocyclopentadiene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Hexachloroethane | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Indeno[1,2,3-cd]pyrene | 0.5 | 0.5 | 0.5 | 5.6 | 11 | - | 8.2 | ***0.74*** | | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | 0.06 | | 0.042 | | U | 0.039 |
| Isophorone | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Naphthalene | 12 | 100 | 100 | 500 | 1000 | - | 12 | | U | 0.0098 | | U | 0.0097 | | U | 0.0097 | | U | 0.0095 | | U | 0.0098 | | U | 0.0098 | | U | 0.011 | | U | 0.0097 |
| Nitrobenzene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| N-Nitroso-di-n-propylamine | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| N-Nitrosodiphenylamine | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Pentachlorophenol | 0.8 | 100 | 100 | 500 | 1000 | - | 1000 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Phenanthrene | 100 | 100 | 100 | 50 | 1000 | - | 1000 | 0.93 | | 0.039 | | U | 0.039 | | U | 0.039 | 0.039 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.085 | | 0.042 | | U | 0.039 |
| Phenol | 0.33 | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Pyrene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 2.6 | | 0.039 | | U | 0.039 | | U | 0.039 | 0.078 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.18 | | 0.042 | | U | 0.039 |
| Total SVOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

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Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-9A | | | SB-9B | | | SB-10 | | | SB-11 A | | | SB-11 B | | | SB-12 | | | SB-13A | | | SB-13B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-005 | | | AC98694-006 | | | AC98694-008 | | | AC98711-006 | | | AC98711-007 | | | AC98694-010 | | | AC98694-011 | | | AC98694-012 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.0-8.5 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Metals** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Antimony | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Arsenic | 13 | 16 | 16 | 16 | 16 | 13 | 16 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Barium | 350 | 350 | 400 | 400 | 10,000 | 433 | 820 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Beryllium | 7.2 | 14 | 72 | 590 | 2,700 | 10 | 47 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Cadmium | 2.5 | 2.5 | 4.3 | 9.3 | 60 | 4 | 7.5 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Calcium | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Total Chromium* | 30/1 | 36/22 | 180/110 | 1,500/400 | 6,800/800 | 41/1 | -/19 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Cobalt | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Copper | 50 | 270 | 270 | 270 | 10,000 | 50 | 1,720 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Iron | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Lead | 63 | 400 | 400 | 1,000 | 3,900 | 63 | 450 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Magnesium | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Manganese | 1,600 | 2,000 | 2,000 | 10,000 | 10,000 | 1,600 | 2,000 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Total Mercury | 0.18 | 0.81 | 0.81 | 2.8 | 5.7 | 0.18 | 0.73 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Nickel | 30 | 140 | 310 | 310 | 10,000 | 30 | 130 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Potassium | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Selenium | 3.9 | 36 | 180 | 1,500 | 6,800 | 3.9 | 4 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Silver | 2 | 36 | 180 | 1,500 | 6,800 | 2 | 8.3 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Sodium | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Thallium | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Vanadium | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Zinc | 109 | 3,300 | 10,000 | 10,000 | 10,000 | 109 | 2,480 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| **Pesticides** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a-Chlordane | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Aldrin | 0.01 | 0.02 | 0.10 | 0.68 | 1.40 | 0.14 | 0.19 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Alpha-BHC | 0.02 | 0.10 | 0.48 | 3.40 | 6.80 | 0.04 | 0.02 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| beta-BHC | 0.04 | 0.07 | 0.36 | 3 | 14 | 0.6 | 0.09 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Chlordane (Total) | 0.09 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| delta-BHC | 0.04 | 100 | 100 | 500 | 1,000 | 0.04 | 0.25 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Dieldrin | 0.01 | 0.04 | 0.2 | 1.40 | 2.8 | 0.01 | 0.1 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan I | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan II | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan Sulfate | 2.4 | 4.8 | 24 | 200 | 920 | - | 1,000 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin | 0.01 | 2.2 | 11 | 89 | 410 | 0.01 | 0.06 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin Aldehyde | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin Ketone | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| gamma-BHC | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Heptachlor | 0.04 | 0.42 | 2.1 | 15 | 29 | 0.14 | 0.38 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Heptachlor Epoxide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Methoxychlor | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDD | 0.0033 | 2.6 | 13 | 92 | 180 | 0.0033 | 14 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDE | 0.0033 | 1.8 | 8.9 | 62 | 120 | 0.0033 | 17 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDT | 0.0033 | 1.7 | 7.9 | 47 | 94 | 0.0033 | 136 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Toxaphene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| y-Chlordane | 0.094 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

# TABLE 1
## Soil Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-9A | | | SB-9B | | | SB-10 | | | SB-11 A | | | SB-11 B | | | SB-12 | | | SB-13A | | | SB-13B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-005 | | | AC98694-006 | | | AC98694-008 | | | AC98711-006 | | | AC98711-007 | | | AC98694-010 | | | AC98694-011 | | | AC98694-012 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.0-8.5 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Polychlroinated Biphenyls (PCBs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aroclor (Total) | 0.1 | 1 | 1 | 1 | 25 | 1 | 3.2 | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1016 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1221 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1232 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1242 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1248 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1254 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1260 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1262 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1268 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| **Additional Analysis** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

**Notes:**

Q = Data Qualifier
J = Estimated Value
U = Not Detected
RL = Reporting Limit
NA = Not Analyzed
All concentrations are in milligrams per kilogram (mg/kg)
**140** = concentration exceeds Protection of Groundwater Soil Cleanup Objective
***140*** = concentration exceeds Unrestricted Use Soil Cleanup Objective
**10** = reporting limit exceeds most stringent Soil Cleanup Objective
* = The SCOs listed for Total Chromium are the trivalent chromium SCOs and hexavalent chromium SCOs, respectively, as total chromium does not have an established SCO.

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-14A | | | SB-14B | | | SB-15 | | | SB-16 | | | SB-17 | | | SB-18 | | | SB-19 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98737-004 | | | AC98737-006 | | | AC98694-004 | | | AC98694-007 | | | AC98737-005 | | | AC98711-002 | | | AC98711-008 | | |
| Date | | | | | | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/28/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 1.5-2.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 7.0-7.5 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.68 | 100 | 100 | 500 | 1,000 | - | 0.68 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,1,2,2-Tetrachloroethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,1,2-Trichloroethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,1-Dichloroethane | 0.27 | 19 | 26 | 240 | 480 | - | 0.27 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,1-Dichloroethene | 0.33 | 100 | 100 | 500 | 1,000 | - | 0.33 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,2,3-Trichlorobenzene | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,2,4-Trichlorobenzene | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,2,4-Trimethylbenzene | 3.6 | 47 | 52 | 190 | 380 | - | 3.6 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| 1,2-Dibromo-3-chloropropane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,2-Dibromoethane | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| 1,2-Dichlorobenzene | 1.10 | 100 | 100 | 500 | 1,000 | - | 1.1 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,2-Dichloroethane | 0.02 | 2.3 | 3.1 | 30 | 60 | 10 | 0.02 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,2-Dichloropropane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,3,5-Trimethylbenzene | 8.4 | 47 | 52 | 190 | 380 | - | 8.4 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| 1,3-Dichlorobenzene | 2.4 | 17 | 49 | 280 | 560 | - | 0.19 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,4-Dichlorobenzene | 1.8 | 9.8 | 13 | 130 | 250 | 20 | 1.8 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,4-Dioxane | 0.1 | 9.8 | 13 | 130 | 250 | 0.1 | 0.1 | U | 0.13 | | U | 0.14 | | U | 0.14 | | U | 0.11 | | U | 0.13 | | U | 0.11 | | U | 0.11 | |
| 2-Butanone | 0.12 | 100 | 100 | 500 | 1,000 | 100 | 0.12 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 2-Hexanone | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 4-Isopropyltoluene | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| 4-Methyl-2-pentanone | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Acetone | 0.05 | 100 | 100 | 500 | 1,000 | 2.2 | 0.05 | U | 0.013 | | U | 0.014 | | U | 0.014 | | U | 0.011 | | U | 0.013 | | U | 0.011 | | U | 0.011 | |
| Benzene | 0.06 | 2.9 | 4.8 | 44 | 89 | 70 | 0.06 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| Bromochloromethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Bromodichloromethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Bromoform | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Bromomethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Carbon disulfide | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Carbon tetrachloride | 0.76 | 1.4 | 2.4 | 22 | 44 | - | 0.76 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Chlorobenzene | 1.1 | 100 | 100 | 500 | 1,000 | 40 | 1.1 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Chloroethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Chloroform | 0.37 | 10 | 49 | 350 | 700 | 12 | 0.37 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Chloromethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| cis-1,2-Dichloroethene | 0.25 | 59 | 100 | 500 | 1,000 | - | 0.25 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| cis-1,3-Dichloropropene | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Cyclohexane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Dibromochloromethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Dichlorodifluoromethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Ethylbenzene | 1 | 30 | 41 | 390 | 780 | - | 1 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| Isopropylbenzene | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| m&p-Xylenes | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| Methyl Acetate | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Methylcyclohexane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Methylene chloride | 0.05 | 51 | 100 | 500 | 1,000 | 12 | 0.05 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Methyl-t-butyl ether | 0.93 | 62 | 100 | 500 | 1,000 | - | 0.93 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| n-Butylbenzene | 12 | - | - | - | - | - | - | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| n-Propylbenzene | 3.9 | 100 | 100 | 500 | 1,000 | - | 3.9 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| o-Xylene | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| sec-Butylbenzene | 11 | 100 | 100 | 500 | 1,000 | - | 11 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| Styrene | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| t-Butylbenzene | 5.9 | 100 | 100 | 500 | 1,000 | - | 5.9 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-14A | | | SB-14B | | | SB-15 | | | SB-16 | | | SB-17 | | | SB-18 | | | SB-19 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98737-004 | | | AC98737-006 | | | AC98694-004 | | | AC98694-007 | | | AC98737-005 | | | AC98711-002 | | | AC98711-008 | | |
| Date | | | | | | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/28/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 1.5-2.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 7.0-7.5 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 1.3 | 5.5 | 19 | 150 | 300 | 2 | 1.3 | | U | 0.0026 | 0.0035 | | 0.0027 | 0.0028 | | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 |
| Toluene | 0.7 | 100 | 100 | 500 | 1,000 | 36 | 0.7 | | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 |
| trans-1,2-Dichloroethene | 0.19 | 100 | 100 | 500 | 1,000 | - | 0.19 | | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 |
| trans-1,3-Dichloropropene | - | - | - | - | - | - | - | | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 |
| Trichloroethene | 0.47 | 10 | 21 | 200 | 400 | 2 | 0.47 | | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 |
| Trichlorofluoromethane | - | - | - | - | - | - | - | | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 |
| Vinyl chloride | 0.02 | 0.21 | 0.90 | 13 | 27 | - | 0.02 | | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 |
| Xylenes (Total) | 0.26 | 100 | 100 | 500 | 1,000 | 0.26 | 1.6 | | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 |
| Total VOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| **Semi-Volatile Organic Compounds (SVOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1'-Biphenyl | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 1,2,4,5-Tetrachlorobenzene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2,3,4,6-Tetrachlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2,4,5-Trichlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2,4,6-Trichlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2,4-Dichlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| 2,4-Dimethylphenol | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| 2,4-Dinitrophenol | - | - | - | - | - | - | - | NA | | | | U | 0.99 | NA | | | NA | | | NA | | | | U | 0.2 | | U | 0.19 |
| 2,4-Dinitrotoluene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2,6-Dinitrotoluene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2-Chloronaphthalene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2-Chlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2-Methylnaphthalene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.2 | | U | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | | U | 0.037 |
| 2-Methylphenol | 0.33 | 100 | 100 | 500 | 1000 | - | 0.33 | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| 2-Nitroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2-Nitrophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 3&4-Methylphenol | 34* | 34* | 100 | 500 | 1000 | - | 0.33 | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| 3,3'-Dichlorobenzidine | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 3-Nitroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 4,6-Dinitro-2-methylphenol | - | - | - | - | - | - | - | NA | | | | U | 0.99 | NA | | | NA | | | NA | | | | U | 0.2 | | U | 0.19 |
| 4-Bromophenyl-phenylether | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 4-Chloro-3-methylphenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 4-Chloroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| 4-Chlorophenyl-phenylether | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 4-Nitroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 4-Nitrophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Acenaphthene | 20 | 100 | 100 | 500 | 1000 | 20 | 98 | 0.053 | | 0.038 | | U | 0.2 | 0.075 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.074 | | 0.037 |
| Acenaphthylene | 100 | 100 | 100 | 500 | 1000 | - | 107 | | U | 0.038 | | U | 0.2 | 0.069 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | | U | 0.037 |
| Acetophenone | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Anthracene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 0.11 | | 0.038 | | U | 0.2 | 0.14 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.25 | | 0.037 |
| Atrazine | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Benzaldehyde | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Benzo[a]anthracene | 1 | 1 | 1 | 5.6 | 11 | - | 1 | 0.51 | | 0.038 | 0.61 | | 0.2 | 0.61 | | 0.039 | 0.038 | | 0.038 | | U | 0.041 | | U | 0.039 | 0.59 | | 0.037 |
| Benzo[a]pyrene | 1 | 1 | 1 | 1 | 1.1 | 2.6 | 22 | 0.48 | | 0.038 | 0.61 | | 0.2 | 0.6 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.51 | | 0.037 |
| Benzo[b]fluoranthene | 1 | 1 | 1 | 5.6 | 11 | - | 1.7 | 0.69 | | 0.038 | 0.86 | | 0.2 | 0.9 | | 0.039 | 0.048 | | 0.038 | | U | 0.041 | | U | 0.039 | 0.69 | | 0.037 |
| Benzo[g,h,i]perylene | 100 | 100 | 100 | 500 | 1000 | - | 1.7 | 0.33 | | 0.038 | 0.45 | | 0.2 | 0.42 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.36 | | 0.037 |
| Benzo[k]fluoranthene | 0.8 | 1 | 3.9 | 56 | 100 | - | 1.7 | 0.22 | | 0.038 | 0.29 | | 0.2 | 0.28 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.18 | | 0.037 |
| bis(2-Chloroethoxy)methane | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| bis(2-Chloroethyl)ether | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| bis(2-Chloroisopropyl)ether | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| bis(2-Ethylhexyl)phthalate | - | - | - | - | - | - | - | NA | | | 0.51 | | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Butylbenzylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-14A | | | SB-14B | | | SB-15 | | | SB-16 | | | SB-17 | | | SB-18 | | | SB-19 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98737-004 | | | AC98737-006 | | | AC98694-004 | | | AC98694-007 | | | AC98737-005 | | | AC98711-002 | | | AC98711-008 | | |
| Date | | | | | | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/28/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 1.5-2.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 7.0-7.5 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Semi-Volatile Organic Compounds (SVOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Caprolactam | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Carbazole | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | 0.053 | | 0.037 |
| Chrysene | 1 | 1 | 3.9 | 56 | 110 | - | 1 | 0.54 | | 0.038 | 0.71 | | 0.2 | 0.71 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.53 | | 0.037 |
| Dibenzo[a,h]anthracene | 0.33 | 0.33 | 0.33 | 0.56 | 1.1 | - | 1000 | 0.12 | | 0.038 | | U | 0.2 | 0.15 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.089 | | 0.037 |
| Dibenzofuran | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | 0.045 | | 0.0094 |
| Diethylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Dimethylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Di-n-butylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| Di-n-octylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Fluoranthene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 0.95 | | 0.038 | 1.2 | | 0.2 | 1.2 | | 0.039 | 0.065 | | 0.038 | | U | 0.041 | | U | 0.039 | 1.4 | | 0.037 |
| Fluorene | 30 | 100 | 100 | 500 | 1000 | 30 | 386 | 0.038 | | 0.038 | | U | 0.2 | 0.059 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.047 | | 0.037 |
| Hexachlorobenzene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Hexachlorobutadiene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Hexachlorocyclopentadiene | - | - | - | - | - | - | - | NA | | | | U | 0.47 | NA | | | NA | | | NA | | | | U | 0.092 | | U | 0.088 |
| Hexachloroethane | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Indeno[1,2,3-cd]pyrene | 0.5 | 0.5 | 0.5 | 5.6 | 11 | - | 8.2 | 0.31 | | 0.038 | 0.42 | | 0.2 | 0.39 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.33 | | 0.037 |
| Isophorone | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Naphthalene | 12 | 100 | 100 | 500 | 1000 | - | 12 | 0.014 | | 0.0095 | | U | 0.05 | 0.023 | | 0.0097 | | U | 0.0095 | | U | 0.01 | | U | 0.098 | | U | 0.0094 |
| Nitrobenzene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| N-Nitroso-di-n-propylamine | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| N-Nitrosodiphenylamine | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Pentachlorophenol | 0.8 | 100 | 100 | 500 | 1000 | - | 1000 | NA | | | | U | 0.99 | NA | | | NA | | | NA | | | | U | 0.2 | | U | 0.19 |
| Phenanthrene | 100 | 100 | 100 | 50 | 1000 | - | 1000 | 0.58 | | 0.038 | 0.55 | | 0.2 | 0.73 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 1.1 | | 0.037 |
| Phenol | 0.33 | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Pyrene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 0.98 | | 0.038 | 1.1 | | 0.2 | 1.3 | | 0.039 | 0.065 | | 0.038 | | U | 0.041 | | U | 0.039 | 1.4 | | 0.037 |
| Total SVOC TICs | - | - | - | - | - | - | - | NA | | | 24 | J | | NA | | | NA | | | NA | | | NA | | | NA | | |

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Proposed CVS/Pharmacy Store No. 10386
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| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-14A | | | SB-14B | | | SB-15 | | | SB-16 | | | SB-17 | | | SB-18 | | | SB-19 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98737-004 | | | AC98737-006 | | | AC98694-004 | | | AC98694-007 | | | AC98737-005 | | | AC98711-002 | | | AC98711-008 | | |
| Date | | | | | | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/28/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 1.5-2.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 7.0-7.5 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Metals** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | - | - | - | - | - | - | - | NA | | | 8,900 | | 240 | NA | | | NA | | | NA | | | 20,000 | | 240 | 8,900 | | 220 |
| Antimony | - | - | - | - | - | - | - | NA | | | | U | 0.95 | NA | | | NA | | | NA | | | | U | 0.94 | | U | 0.9 |
| Arsenic | 13 | 16 | 16 | 16 | 16 | 13 | 16 | NA | | | 7.9 | | 0.24 | NA | | | NA | | | NA | | | 1.6 | | 0.24 | 3.8 | | 0.22 |
| Barium | 350 | 350 | 400 | 400 | 10,000 | 433 | 820 | NA | | | 320 | | 12 | NA | | | NA | | | NA | | | 120 | | 12 | 60 | | 11 |
| Beryllium | 7.2 | 14 | 72 | 590 | 2,700 | 10 | 47 | NA | | | 0.48 | | 0.24 | NA | | | NA | | | NA | | | 0.32 | | 0.24 | 0.32 | | 0.22 |
| Cadmium | 2.5 | 2.5 | 4.3 | 9.3 | 60 | 4 | 7.5 | NA | | | ***3.7*** | | 0.48 | NA | | | NA | | | NA | | | | U | 0.47 | | U | 0.45 |
| Calcium | - | - | - | - | - | - | - | NA | | | 21,000 | | 1200 | NA | | | NA | | | NA | | | 3,300 | | 1,200 | | U | 1,100 |
| Total Chromium* | 30/1 | 36/22 | 180/110 | 1,500/400 | 6,800/800 | 41/1 | -/19 | NA | | | **36** | | 6 | NA | | | NA | | | NA | | | **31** | | 5.9 | ***13*** | | 5.6 |
| Cobalt | - | - | - | - | - | - | - | NA | | | 7.6 | | 3 | NA | | | NA | | | NA | | | 12 | | 2.9 | 5.9 | | 2.8 |
| Copper | 50 | 270 | 270 | 270 | 10,000 | 50 | 1,720 | NA | | | **4,900** | | 6 | NA | | | NA | | | NA | | | 38 | | 5.9 | 24 | | 5.6 |
| Iron | - | - | - | - | - | - | - | NA | | | 16,000 | | 240 | NA | | | NA | | | NA | | | 30,000 | | 240 | 14,000 | | 220 |
| Lead | 63 | 400 | 400 | 1,000 | 3,900 | 63 | 450 | NA | | | **720** | | 6 | NA | | | NA | | | NA | | | 20 | | 5.9 | ***130*** | | 5.6 |
| Magnesium | - | - | - | - | - | - | - | NA | | | 4,800 | | 600 | NA | | | NA | | | NA | | | 6,000 | | 590 | 2,400 | | 560 |
| Manganese | 1,600 | 2,000 | 2,000 | 10,000 | 10,000 | 1,600 | 2,000 | NA | | | 300 | | 12 | NA | | | NA | | | NA | | | ***1,800*** | | 12 | 310 | | 11 |
| Total Mercury | 0.18 | 0.81 | 0.81 | 2.8 | 5.7 | 0.18 | 0.73 | NA | | | **3** | | 0.099 | NA | | | NA | | | NA | | | | U | 0.098 | ***0.33*** | | 0.094 |
| Nickel | 30 | 140 | 310 | 310 | 10,000 | 30 | 130 | NA | | | 20 | | 6 | NA | | | NA | | | NA | | | 29 | | 5.9 | 12 | | 5.6 |
| Potassium | - | - | - | - | - | - | - | NA | | | 890 | | 600 | NA | | | NA | | | NA | | | 1,800 | | 590 | 720 | | 560 |
| Selenium | 3.9 | 36 | 180 | 1,500 | 6,800 | 3.9 | 4 | NA | | | | U | 2.4 | NA | | | NA | | | NA | | | | U | 2.4 | | U | 2.2 |
| Silver | 2 | 36 | 180 | 1,500 | 6,800 | 2 | 8.3 | NA | | | 0.54 | | 0.24 | NA | | | NA | | | NA | | | | U | 0.24 | | U | 0.22 |
| Sodium | - | - | - | - | - | - | - | NA | | | | U | 300 | NA | | | NA | | | NA | | | | U | 290 | | U | 280 |
| Thallium | - | - | - | - | - | - | - | NA | | | | U | 0.48 | NA | | | NA | | | NA | | | | U | 0.47 | | U | 0.45 |
| Vanadium | - | - | - | - | - | - | - | NA | | | 39 | | 12 | NA | | | NA | | | NA | | | 40 | | 12 | 15 | | 11 |
| Zinc | 109 | 3,300 | 10,000 | 10,000 | 10,000 | 109 | 2,480 | NA | | | ***580*** | | 12 | NA | | | NA | | | NA | | | 75 | | 12 | 69 | | 11 |
| **Pesticides** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a-Chlordane | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Aldrin | 0.01 | 0.02 | 0.10 | 0.68 | 1.40 | 0.14 | 0.19 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Alpha-BHC | 0.02 | 0.10 | 0.48 | 3.40 | 6.80 | 0.04 | 0.02 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| beta-BHC | 0.04 | 0.07 | 0.36 | 3 | 14 | 0.6 | 0.09 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Chlordane (Total) | 0.09 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| delta-BHC | 0.04 | 100 | 100 | 500 | 1,000 | 0.04 | 0.25 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Dieldrin | 0.01 | 0.04 | 0.2 | 1.40 | 2.8 | 0.01 | 0.1 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan I | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan II | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan Sulfate | 2.4 | 4.8 | 24 | 200 | 920 | - | 1,000 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin | 0.01 | 2.2 | 11 | 89 | 410 | 0.01 | 0.06 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin Aldehyde | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin Ketone | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| gamma-BHC | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Heptachlor | 0.04 | 0.42 | 2.1 | 15 | 29 | 0.14 | 0.38 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Heptachlor Epoxide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Methoxychlor | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDD | 0.0033 | 2.6 | 13 | 92 | 180 | 0.0033 | 14 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDE | 0.0033 | 1.8 | 8.9 | 62 | 120 | 0.0033 | 17 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDT | 0.0033 | 1.7 | 7.9 | 47 | 94 | 0.0033 | 136 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Toxaphene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| y-Chlordane | 0.094 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

# TABLE 1
## Soil Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-14A | | | SB-14B | | | SB-15 | | | SB-16 | | | SB-17 | | | SB-18 | | | SB-19 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98737-004 | | | AC98737-006 | | | AC98694-004 | | | AC98694-007 | | | AC98737-005 | | | AC98711-002 | | | AC98711-008 | | |
| Date | | | | | | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/28/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 1.5-2.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 7.0-7.5 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Polychlroinated Biphenyls (PCBs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aroclor (Total) | 0.1 | 1 | 1 | 1 | 25 | 1 | 3.2 | NA | | | ***0.16*** | | 0.03 | 0.04 | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1016 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1221 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1232 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1242 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1248 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1254 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1260 | - | - | - | - | - | - | - | NA | | | 0.16 | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1262 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | 0.04 | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1268 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| **Additional Analysis** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

**Notes:**

Q = Data Qualifier
U = Not Detected
NA = Not Analyzed
J = Estimated Value
RL = Reporting Limit
All concentrations are in milligrams per kilogram (mg/kg)
**140** = concentration exceeds Protection of Groundwater Soil Cleanup Objective
***140*** = concentration exceeds Unrestricted Use Soil Cleanup Objective
**10** = reporting limit exceeds most stringent Soil Cleanup Objective
* = The SCOs listed for Total Chromium are the trivalent chromium SCOs and hexavalent chromium SCOs, respectively, as total chromium does not have an established SCO.

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-20 | | | SB-21 | | | SB-22 | | | SB-23 | | | SB-24C | | | SB-24 | | | SB-25 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98711-003 | | | AC98711-004 | | | AC98711-009 | | | AC98711-001 | | | AC98737-008 | | | AC98737-009 | | | AC98737-007 | | |
| Date | | | | | | | | 6/28/2017 | | | 6/28/2017 | | | 6/27/2017 | | | 6/28/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/29/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.0-0.5 | | | 2.5-3.0 | | | 1.0-1.5 | | | 3.5-4.0 | | | Composite | | | 0.5-1.0 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.68 | 100 | 100 | 500 | 1,000 | - | 0.68 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,1,2,2-Tetrachloroethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,1,2-Trichloroethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,1-Dichloroethane | 0.27 | 19 | 26 | 240 | 480 | - | 0.27 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,1-Dichloroethene | 0.33 | 100 | 100 | 500 | 1,000 | - | 0.33 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,2,3-Trichlorobenzene | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,2,4-Trichlorobenzene | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,2,4-Trimethylbenzene | 3.6 | 47 | 52 | 190 | 380 | - | 3.6 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| 1,2-Dibromo-3-chloropropane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,2-Dibromoethane | - | - | - | - | - | - | - | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| 1,2-Dichlorobenzene | 1.10 | 100 | 100 | 500 | 1,000 | - | 1.1 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,2-Dichloroethane | 0.02 | 2.3 | 3.1 | 30 | 60 | 10 | 0.02 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,2-Dichloropropane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,3,5-Trimethylbenzene | 8.4 | 47 | 52 | 190 | 380 | - | 8.4 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| 1,3-Dichlorobenzene | 2.4 | 17 | 49 | 280 | 560 | - | 0.19 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,4-Dichlorobenzene | 1.8 | 9.8 | 13 | 130 | 250 | 20 | 1.8 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,4-Dioxane | 0.1 | 9.8 | 13 | 130 | 250 | 0.1 | 0.1 | | U | 0.10 | | U | 0.13 | | U | 0.10 | | U | 0.11 | ND | | 0.12 | | U | 0.13 | | U | 0.12 |
| 2-Butanone | 0.12 | 100 | 100 | 500 | 1,000 | 100 | 0.12 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | 0.038 | | 0.0026 | | U | 0.0023 |
| 2-Hexanone | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 4-Isopropyltoluene | - | - | - | - | - | - | - | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| 4-Methyl-2-pentanone | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Acetone | 0.05 | 100 | 100 | 500 | 1,000 | 2.2 | 0.05 | | U | 0.0096 | | U | 0.013 | | U | 0.010 | | U | 0.011 | ND | | 0.012 | **0.25** | | 0.013 | | U | 0.012 |
| Benzene | 0.06 | 2.9 | 4.8 | 44 | 89 | 70 | 0.06 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| Bromochloromethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Bromodichloromethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Bromoform | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Bromomethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Carbon disulfide | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | 0.006 | | 0.0026 | | U | 0.0023 |
| Carbon tetrachloride | 0.76 | 1.4 | 2.4 | 22 | 44 | - | 0.76 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Chlorobenzene | 1.1 | 100 | 100 | 500 | 1,000 | 40 | 1.1 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Chloroethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Chloroform | 0.37 | 10 | 49 | 350 | 700 | 12 | 0.37 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Chloromethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| cis-1,2-Dichloroethene | 0.25 | 59 | 100 | 500 | 1,000 | - | 0.25 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| cis-1,3-Dichloropropene | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Cyclohexane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Dibromochloromethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Dichlorodifluoromethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Ethylbenzene | 1 | 30 | 41 | 390 | 780 | - | 1 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| Isopropylbenzene | - | - | - | - | - | - | - | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| m&p-Xylenes | - | - | - | - | - | - | - | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| Methyl Acetate | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Methylcyclohexane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Methylene chloride | 0.05 | 51 | 100 | 500 | 1,000 | 12 | 0.05 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | 0.0096 | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Methyl-t-butyl ether | 0.93 | 62 | 100 | 500 | 1,000 | - | 0.93 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| n-Butylbenzene | 12 | - | - | - | - | - | - | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| n-Propylbenzene | 3.9 | 100 | 100 | 500 | 1,000 | - | 3.9 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| o-Xylene | - | - | - | - | - | - | - | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| sec-Butylbenzene | 11 | 100 | 100 | 500 | 1,000 | - | 11 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| Styrene | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| t-Butylbenzene | 5.9 | 100 | 100 | 500 | 1,000 | - | 5.9 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-20 | | | SB-21 | | | SB-22 | | | SB-23 | | | SB-24C | | | SB-24 | | | SB-25 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98711-003 | | | AC98711-004 | | | AC98711-009 | | | AC98711-001 | | | AC98737-008 | | | AC98737-009 | | | AC98737-007 | | |
| Date | | | | | | | | 6/28/2017 | | | 6/28/2017 | | | 6/27/2017 | | | 6/28/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/29/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.0-0.5 | | | 2.5-3.0 | | | 1.0-1.5 | | | 3.5-4.0 | | | Composite | | | 0.5-1.0 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 1.3 | 5.5 | 19 | 150 | 300 | 2 | 1.3 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | | ND | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Toluene | 0.7 | 100 | 100 | 500 | 1,000 | 36 | 0.7 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | | ND | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| trans-1,2-Dichloroethene | 0.19 | 100 | 100 | 500 | 1,000 | - | 0.19 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | | ND | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| trans-1,3-Dichloropropene | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | | ND | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Trichloroethene | 0.47 | 10 | 21 | 200 | 400 | 2 | 0.47 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | | ND | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Trichlorofluoromethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | | ND | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Vinyl chloride | 0.02 | 0.21 | 0.90 | 13 | 27 | - | 0.02 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | | ND | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Xylenes (Total) | 0.26 | 100 | 100 | 500 | 1,000 | 0.26 | 1.6 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | | ND | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| Total VOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | 0.0050 | J | | NA | | | NA | | |
| **Semi-Volatile Organic Compounds (SVOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1'-Biphenyl | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 1,2,4,5-Tetrachlorobenzene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2,3,4,6-Tetrachlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2,4,5-Trichlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2,4,6-Trichlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2,4-Dichlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| 2,4-Dimethylphenol | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| 2,4-Dinitrophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | | U | 0.19 | NA | | | | U | 0.2 | | U | 0.58 | NA | | |
| 2,4-Dinitrotoluene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2,6-Dinitrotoluene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2-Chloronaphthalene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2-Chlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2-Methylnaphthalene | - | - | - | - | - | - | - | | U | 0.37 | | U | 0.04 | | U | 0.039 | | U | 0.04 | | U | 0.039 | | U | 0.12 | | U | 0.038 |
| 2-Methylphenol | 0.33 | 100 | 100 | 500 | 1000 | - | 0.33 | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| 2-Nitroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2-Nitrophenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 3&4-Methylphenol | 34* | 34* | 100 | 500 | 1000 | - | 0.33 | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| 3,3'-Dichlorobenzidine | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 3-Nitroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 4,6-Dinitro-2-methylphenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | | U | 0.19 | NA | | | | U | 0.2 | | U | 0.58 | NA | | |
| 4-Bromophenyl-phenylether | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 4-Chloro-3-methylphenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 4-Chloroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| 4-Chlorophenyl-phenylether | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 4-Nitroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 4-Nitrophenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Acenaphthene | 20 | 100 | 100 | 500 | 1000 | 20 | 98 | | U | 0.37 | | U | 0.04 | | U | 0.039 | | U | 0.04 | | U | 0.039 | | U | 0.12 | | U | 0.038 |
| Acenaphthylene | 100 | 100 | 100 | 500 | 1000 | - | 107 | | U | 0.37 | | U | 0.04 | | U | 0.039 | | U | 0.04 | | U | 0.039 | | U | 0.12 | | U | 0.038 |
| Acetophenone | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Anthracene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 0.54 | | 0.37 | | U | 0.04 | | U | 0.039 | 0.094 | | 0.04 | 0.098 | | 0.039 | | U | 0.12 | | U | 0.038 |
| Atrazine | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Benzaldehyde | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Benzo[a]anthracene | 1 | 1 | 1 | 5.6 | 11 | - | 1 | **1.7** | | 0.37 | 0.086 | | 0.04 | | U | 0.039 | 0.24 | | 0.04 | 0.30 | | 0.039 | 0.55 | | 0.12 | | U | 0.038 |
| Benzo[a]pyrene | 1 | 1 | 1 | 1 | 1.1 | 2.6 | 22 | ***1.5*** | | 0.37 | 0.074 | | 0.04 | | U | 0.039 | 0.2 | | 0.04 | 0.28 | | 0.039 | 0.78 | | 0.12 | | U | 0.038 |
| Benzo[b]fluoranthene | 1 | 1 | 1 | 5.6 | 11 | - | 1.7 | **1.9** | | 0.37 | 0.1 | | 0.04 | | U | 0.039 | 0.26 | | 0.04 | 0.37 | | 0.039 | 0.64 | | 0.12 | 0.04 | | 0.038 |
| Benzo[g,h,i]perylene | 100 | 100 | 100 | 500 | 1000 | - | 1.7 | 1.2 | | 0.37 | 0.051 | | 0.04 | | U | 0.039 | 0.11 | | 0.04 | 0.18 | | 0.039 | 0.98 | | 0.12 | | U | 0.038 |
| Benzo[k]fluoranthene | 0.8 | 1 | 3.9 | 56 | 100 | - | 1.7 | 0.68 | | 0.37 | | U | 0.04 | | U | 0.039 | 0.086 | | 0.04 | 0.13 | | 0.039 | 0.21 | | 0.12 | | U | 0.038 |
| bis(2-Chloroethoxy)methane | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| bis(2-Chloroethyl)ether | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| bis(2-Chloroisopropyl)ether | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| bis(2-Ethylhexyl)phthalate | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | 0.33 | | 0.12 | NA | | |
| Butylbenzylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-20 | | | SB-21 | | | SB-22 | | | SB-23 | | | SB-24C | | | SB-24 | | | SB-25 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98711-003 | | | AC98711-004 | | | AC98711-009 | | | AC98711-001 | | | AC98737-008 | | | AC98737-009 | | | AC98737-007 | | |
| Date | | | | | | | | 6/28/2017 | | | 6/28/2017 | | | 6/27/2017 | | | 6/28/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/29/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.0-0.5 | | | 2.5-3.0 | | | 1.0-1.5 | | | 3.5-4.0 | | | Composite | | | 0.5-1.0 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Semi-Volatile Organic Compounds (SVOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Caprolactam | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Carbazole | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | 0.046 | | 0.039 | | U | 0.12 | NA | | |
| Chrysene | 1 | 1 | 3.9 | 56 | 110 | - | 1 | **1.6** | | 0.37 | 0.094 | | 0.04 | | U | 0.039 | 0.23 | | 0.04 | 0.33 | | 0.039 | 0.82 | | 0.12 | | U | 0.038 |
| Dibenzo[a,h]anthracene | 0.33 | 0.33 | 0.33 | 0.56 | 1.1 | - | 1000 | | U | 0.37 | | U | 0.04 | | U | 0.039 | | U | 0.04 | 0.061 | | 0.039 | 0.23 | | 0.12 | | U | 0.038 |
| Dibenzofuran | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | 0.019 | | 0.0098 | | U | 0.029 | NA | | |
| Diethylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Dimethylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Di-n-butylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| Di-n-octylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Fluoranthene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 3.8 | | 0.37 | 0.16 | | 0.04 | | U | 0.039 | 0.44 | | 0.04 | 0.60 | | 0.039 | 0.69 | | 0.12 | 0.053 | | 0.038 |
| Fluorene | 30 | 100 | 100 | 500 | 1000 | 30 | 386 | | U | 0.37 | | U | 0.04 | | U | 0.039 | | U | 0.04 | | U | 0.039 | | U | 0.12 | | U | 0.038 |
| Hexachlorobenzene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Hexachlorobutadiene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Hexachlorocyclopentadiene | - | - | - | - | - | - | - | NA | | | | U | 0.094 | | U | 0.091 | NA | | | | U | 0.092 | | U | 0.27 | NA | | |
| Hexachloroethane | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Indeno[1,2,3-cd]pyrene | 0.5 | 0.5 | 0.5 | 5.6 | 11 | - | 8.2 | ***0.98*** | | 0.37 | 0.045 | | 0.04 | | U | 0.039 | 0.095 | | 0.04 | 0.17 | | 0.039 | 0.39 | | 0.12 | | U | 0.038 |
| Isophorone | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Naphthalene | 12 | 100 | 100 | 500 | 1000 | - | 12 | | U | 0.093 | 0.01 | | 0.0099 | | U | 0.0097 | | U | 0.0099 | 0.020 | | 0.0098 | | U | 0.029 | | U | 0.0096 |
| Nitrobenzene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| N-Nitroso-di-n-propylamine | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| N-Nitrosodiphenylamine | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Pentachlorophenol | 0.8 | 100 | 100 | 500 | 1000 | - | 1000 | NA | | | | U | 0.2 | | U | 0.19 | NA | | | | U | 0.2 | | U | 0.58 | NA | | |
| Phenanthrene | 100 | 100 | 100 | 50 | 1000 | - | 1000 | 2.8 | | 0.37 | 0.13 | | 0.04 | | U | 0.039 | 0.34 | | 0.04 | 0.41 | | 0.039 | 0.32 | | 0.12 | | U | 0.038 |
| Phenol | 0.33 | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Pyrene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 3.9 | | 0.37 | 0.18 | | 0.04 | | U | 0.039 | 0.48 | | 0.04 | 0.60 | | 0.039 | 0.76 | | 0.12 | 0.053 | | 0.038 |
| Total SVOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | 20 | J | | NA | | | NA | | |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-20 | | | SB-21 | | | SB-22 | | | SB-23 | | | SB-24C | | | SB-24 | | | SB-25 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98711-003 | | | AC98711-004 | | | AC98711-009 | | | AC98711-001 | | | AC98737-008 | | | AC98737-009 | | | AC98737-007 | | |
| Date | | | | | | | | 6/28/2017 | | | 6/28/2017 | | | 6/27/2017 | | | 6/28/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/29/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.0-0.5 | | | 2.5-3.0 | | | 1.0-1.5 | | | 3.5-4.0 | | | Composite | | | 0.5-1.0 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Metals** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | - | - | - | - | - | - | - | NA | | | 11,000 | | 240 | 14,000 | | 230 | NA | | | 15,000 | | 240 | 16,000 | | 230 | 26,000 | | 230 |
| Antimony | - | - | - | - | - | - | - | NA | | | | U | 0.95 | | U | 0.93 | NA | | | | U | 0.94 | | U | 0.93 | | U | 0.92 |
| Arsenic | 13 | 16 | 16 | 16 | 16 | 13 | 16 | NA | | | **27** | | 0.24 | 2.6 | | 0.23 | NA | | | 3.2 | | 0.24 | 13 | | 0.23 | 6.2 | | 0.23 |
| Barium | 350 | 350 | 400 | 400 | 10,000 | 433 | 820 | NA | | | 110 | | 12 | 170 | | 12 | NA | | | 120 | | 12 | ***750*** | | 12 | 140 | | 11 |
| Beryllium | 7.2 | 14 | 72 | 590 | 2,700 | 10 | 47 | NA | | | 0.7 | | 0.24 | 0.28 | | 0.23 | NA | | | 0.43 | | 0.24 | 0.52 | | 0.23 | 0.5 | | 0.23 |
| Cadmium | 2.5 | 2.5 | 4.3 | 9.3 | 60 | 4 | 7.5 | NA | | | | U | 0.48 | | U | 0.47 | NA | | | | U | 0.47 | ***4.2*** | | 0.47 | | U | 0.46 |
| Calcium | - | - | - | - | - | - | - | NA | | | 6,700 | | 1,200 | 15,000 | | 1,200 | NA | | | 1,800 | | 1,200 | 36,000 | | 1,200 | 4,100 | | 1,100 |
| Total Chromium* | 30/1 | 36/22 | 180/110 | 1,500/400 | 6,800/800 | 41/1 | -/19 | NA | | | **30** | | 6 | **29** | | 5.8 | NA | | | **26** | | 5.9 | **45** | | 5.8 | **32** | | 5.7 |
| Cobalt | - | - | - | - | - | - | - | NA | | | 8.7 | | 3 | 8 | | 2.9 | NA | | | 9.1 | | 2.9 | 12 | | 2.9 | 14 | | 2.9 |
| Copper | 50 | 270 | 270 | 270 | 10,000 | 50 | 1,720 | NA | | | ***87*** | | 6 | 29 | | 5.8 | NA | | | 32 | | 5.9 | ***140*** | | 5.8 | 31 | | 5.7 |
| Iron | - | - | - | - | - | - | - | NA | | | 20,000 | | 240 | 21,000 | | 230 | NA | | | 24,000 | | 240 | 43,000 | | 230 | 39,000 | | 230 |
| Lead | 63 | 400 | 400 | 1,000 | 3,900 | 63 | 450 | NA | | | ***100*** | | 6 | ***280*** | | 5.8 | NA | | | ***290*** | | 5.9 | **4,300** | | 5.8 | ***260*** | | 5.7 |
| Magnesium | - | - | - | - | - | - | - | NA | | | 5,300 | | 600 | 11,000 | | 580 | NA | | | 4,200 | | 590 | 12,000 | | 580 | 6,700 | | 570 |
| Manganese | 1,600 | 2,000 | 2,000 | 10,000 | 10,000 | 1,600 | 2,000 | NA | | | 310 | | 12 | 290 | | 12 | NA | | | 300 | | 12 | 670 | | 12 | 930 | | 11 |
| Total Mercury | 0.18 | 0.81 | 0.81 | 2.8 | 5.7 | 0.18 | 0.73 | NA | | | **28** | | 2 | ***0.54*** | | 0.097 | NA | | | **1.4** | | 0.098 | **0.89** | | 0.097 | ***0.25*** | | 0.096 |
| Nickel | 30 | 140 | 310 | 310 | 10,000 | 30 | 130 | NA | | | 19 | | 6 | 20 | | 5.8 | NA | | | 20 | | 5.9 | ***36*** | | 5.8 | 28 | | 5.7 |
| Potassium | - | - | - | - | - | - | - | NA | | | 760 | | 600 | 1,300 | | 580 | NA | | | 1,300 | | 590 | 1,700 | | 580 | 1,300 | | 570 |
| Selenium | 3.9 | 36 | 180 | 1,500 | 6,800 | 3.9 | 4 | NA | | | 2.4 | | 2.4 | | U | 2.3 | NA | | | | U | 2.4 | 2.4 | | 2.3 | | U | 2.3 |
| Silver | 2 | 36 | 180 | 1,500 | 6,800 | 2 | 8.3 | NA | | | | U | 0.24 | | U | 0.23 | NA | | | | U | 0.24 | 0.39 | | 0.23 | | U | 0.23 |
| Sodium | - | - | - | - | - | - | - | NA | | | | U | 300 | | U | 290 | NA | | | 490 | | 290 | 710 | | 290 | | U | 290 |
| Thallium | - | - | - | - | - | - | - | NA | | | | U | 0.48 | | U | 0.47 | NA | | | | U | 0.47 | | U | 0.47 | | U | 0.46 |
| Vanadium | - | - | - | - | - | - | - | NA | | | 29 | | 12 | 27 | | 12 | NA | | | 29 | | 12 | 49 | | 12 | 41 | | 11 |
| Zinc | 109 | 3,300 | 10,000 | 10,000 | 10,000 | 109 | 2,480 | NA | | | ***110*** | | 12 | ***180*** | | 12 | NA | | | ***200*** | | 12 | ***1,500*** | | 12 | ***120*** | | 11 |
| **Pesticides** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a-Chlordane | - | - | - | - | - | - | - | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | 0.0076 | | 0.0058 | NA | | |
| Aldrin | 0.01 | 0.02 | 0.10 | 0.68 | 1.40 | 0.14 | 0.19 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Alpha-BHC | 0.02 | 0.10 | 0.48 | 3.40 | 6.80 | 0.04 | 0.02 | NA | | | | U | 0.0012 | NA | | | NA | | | | U | 0.0012 | | U | 0.0012 | NA | | |
| beta-BHC | 0.04 | 0.07 | 0.36 | 3 | 14 | 0.6 | 0.09 | NA | | | | U | 0.0012 | NA | | | NA | | | | U | 0.0012 | | U | 0.0012 | NA | | |
| Chlordane (Total) | 0.09 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | 0.0076 | | 0.0058 | NA | | |
| delta-BHC | 0.04 | 100 | 100 | 500 | 1,000 | 0.04 | 0.25 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Dieldrin | 0.01 | 0.04 | 0.2 | 1.40 | 2.8 | 0.01 | 0.1 | NA | | | | U | 0.0012 | NA | | | NA | | | | U | 0.0012 | 0.0043 | d | 0.0012 | NA | | |
| Endosulfan I | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Endosulfan II | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Endosulfan Sulfate | 2.4 | 4.8 | 24 | 200 | 920 | - | 1,000 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Endrin | 0.01 | 2.2 | 11 | 89 | 410 | 0.01 | 0.06 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Endrin Aldehyde | - | - | - | - | - | - | - | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Endrin Ketone | - | - | - | - | - | - | - | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| gamma-BHC | - | - | - | - | - | - | - | NA | | | | U | 0.0012 | NA | | | NA | | | | U | 0.0012 | | U | 0.0012 | NA | | |
| Heptachlor | 0.04 | 0.42 | 2.1 | 15 | 29 | 0.14 | 0.38 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Heptachlor Epoxide | - | - | - | - | - | - | - | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Methoxychlor | - | - | - | - | - | - | - | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| p,p'-DDD | 0.0033 | 2.6 | 13 | 92 | 180 | 0.0033 | 14 | NA | | | | U | 0.003 | NA | | | NA | | | | U | 0.0029 | ***0.028*** | | 0.0029 | NA | | |
| p,p'-DDE | 0.0033 | 1.8 | 8.9 | 62 | 120 | 0.0033 | 17 | NA | | | | U | 0.003 | NA | | | NA | | | | U | 0.0029 | ***0.011*** | | 0.0029 | NA | | |
| p,p'-DDT | 0.0033 | 1.7 | 7.9 | 47 | 94 | 0.0033 | 136 | NA | | | | U | 0.003 | NA | | | NA | | | | U | 0.0029 | | U | 0.0029 | NA | | |
| Toxaphene | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | NA | | | | U | 0.029 | | U | 0.029 | NA | | |
| γ-Chlordane | 0.094 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |

# TABLE 1
## Soil Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-20 | | | SB-21 | | | SB-22 | | | SB-23 | | | SB-24C | | | SB-24 | | | SB-25 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98711-003 | | | AC98711-004 | | | AC98711-009 | | | AC98711-001 | | | AC98737-008 | | | AC98737-009 | | | AC98737-007 | | |
| Date | | | | | | | | 6/28/2017 | | | 6/28/2017 | | | 6/27/2017 | | | 6/28/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/29/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.0-0.5 | | | 2.5-3.0 | | | 1.0-1.5 | | | 3.5-4.0 | | | Composite | | | 0.5-1.0 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Polychlroinated Biphenyls (PCBs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aroclor (Total) | 0.1 | 1 | 1 | 1 | 25 | 1 | 3.2 | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | 0.064 | | 0.029 | | U | 0.029 |
| Aroclor-1016 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1221 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1232 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1242 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1248 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1254 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | 0.064 | | 0.029 | | U | 0.029 |
| Aroclor-1260 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1262 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1268 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| **Additional Analysis** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | | U | 0.28 | NA | | | NA | | |

**Notes:**

Q = Data Qualifier
U = Not Detected
NA = Not Analyzed
J = Estimated Value
RL = Reporting Limit
All concentrations are in milligrams per kilogram (mg/kg)
**140** = concentration exceeds Protection of Groundwater Soil Cleanup Objective
***140*** = concentration exceeds Unrestricted Use Soil Cleanup Objective
**10** = reporting limit exceeds most stringent Soil Cleanup Objective
* = The SCOs listed for Total Chromium are the trivalent chromium SCOs and hexavalent chromium SCOs, respectively, as total chromium does not have an established SCO.

# TABLE 2
## Groundwater Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Ambient Water Quality Standards & Guidance Values for Groundwater | TWP-2 | | | TWP-1 | | |
|---|---|---|---|---|---|---|---|
| Lab ID | | AC98757-001 | | | AC98757-002 | | |
| Date | | 6/28/2017 | | | 6/29/2017 | | |
| Matrix | | Groundwater | | | Groundwater | | |
| Well Depth (feet bgs) | | 18.50 | | | 19.75 | | |
| Units | | ug/L | | | ug/L | | |
| | | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs)** | | | | | | | |
| 1,1,1-Trichloroethane | 5 | | U | **10** | | U | **20** |
| 1,1,2,2-Tetrachloroethane | 5 | | U | **10** | | U | **20** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5 | | U | **10** | | U | **20** |
| 1,1,2-Trichloroethane | 1 | | U | **10** | | U | **20** |
| 1,1-Dichloroethane | 5 | | U | **10** | | U | **20** |
| 1,1-Dichloroethene | 5 | | U | **10** | | U | **20** |
| 1,2,3-Trichlorobenzene | 5 | | U | **10** | | U | **20** |
| 1,2,4-Trichlorobenzene | 5 | | U | **10** | | U | **20** |
| 1,2,4-Trimethylbenzene | 5 | **740** | | **10** | **2,500** | | **20** |
| 1,2-Dibromo-3-chloropropane | 0.04 | | U | **10** | | U | **20** |
| 1,2-Dibromoethane | - | | U | **10** | | U | **20** |
| 1,2-Dichlorobenzene | 4.7 | | U | **10** | | U | **20** |
| 1,2-Dichloroethane | 5 | | U | **5** | | U | **10** |
| 1,2-Dichloropropane | 1 | | U | **10** | | U | **20** |
| 1,3,5-Trimethylbenzene | 5 | **87** | | **10** | **890** | | 20 |
| 1,3-Dichlorobenzene | 5 | | U | **10** | | U | 20 |
| 1,4-Dichlorobenzene | 5 | | U | **10** | | U | 20 |
| 1,4-Dioxane | - | | U | 500 | | U | 1,000 |
| 2-Butanone | 50 | | U | 10 | | U | 20 |
| 2-Hexanone | 50 | | U | 10 | | U | 20 |
| 4-Isopropyltoluene | 5 | | U | **10** | | U | **20** |
| 4-Methyl-2-pentanone | 50 | | U | 10 | | U | 20 |
| Acetone | 50 | **63** | | **50** | **140** | | **100** |
| Benzene | 1 | **560** | | **5** | **94** | | **10** |
| Bromochloromethane | 5 | | U | **10** | | U | **20** |
| Bromodichloromethane | 50 | | U | 10 | | U | 20 |
| Bromoform | 50 | | U | 10 | | U | 20 |
| Bromomethane | 5 | | U | **10** | | U | **20** |
| Carbon disulfide | 60 | | U | 10 | | U | 20 |
| Carbon tetrachloride | 50 | | U | 10 | | U | 20 |
| Chlorobenzene | 5 | | U | **10** | | U | **20** |
| Chloroethane | 5 | | U | **10** | | U | **20** |
| Chloroform | 7 | | U | **10** | | U | **20** |
| Chloromethane | - | | U | 10 | | U | 20 |
| cis-1,2-Dichloroethene | 5 | | U | **10** | | U | **20** |
| cis-1,3-Dichloropropene | - | | U | 10 | | U | 20 |
| Cyclohexane | - | 240 | | 10 | 830 | | 20 |
| Dibromochloromethane | 50 | | U | 10 | | U | 20 |
| Dichlorodifluoromethane | 5 | | U | **10** | | U | **20** |
| Ethylbenzene | 5 | **660** | | **10** | **1,700** | | **20** |
| Isopropylbenzene | 5 | **100** | | **10** | **250** | | **20** |
| m&p-Xylenes | 5 | **960** | | **10** | **4,600** | | **20** |
| Methyl Acetate | - | | U | 10 | | U | 20 |
| Methylcyclohexane | - | 140 | | 10 | 550 | | 20 |
| Methylene chloride | 5 | | U | **10** | | U | **20** |
| Methyl-t-butyl ether | 10 | **140** | | 5 | | U | 10 |
| n-Butylbenzene | 5 | | U | **10** | **30** | | **20** |
| n-Propylbenzene | 5 | **200** | | **10** | **560** | | **20** |
| o-Xylene | 5 | **130** | | **10** | **410** | | **20** |
| sec-Butylbenzene | 5 | **11** | | **10** | **25** | | **20** |
| Styrene | 5 | | U | **10** | | U | **20** |
| t-Butylbenzene | 5 | | U | **10** | | U | **20** |
| Tetrachloroethene | 5 | | U | **10** | | U | **20** |
| Toluene | 5 | **67** | | **10** | **150** | | **20** |
| trans-1,2-Dichloroethene | 5 | | U | 10 | | U | 20 |
| trans-1,3-Dichloropropene | - | | U | 10 | | U | 20 |
| Trichloroethene | 5 | | U | **10** | | U | **20** |
| Trichlorofluoromethane | 5 | | U | **10** | | U | **20** |
| Vinyl chloride | 2 | | U | **10** | | U | **20** |
| Xylenes (Total) | 5 | **1,100** | | **10** | **5,000** | | **20** |

# TABLE 2
## Groundwater Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Ambient Water Quality Standards & Guidance Values for Groundwater | TWP-2 | | | TWP-1 | | |
|---|---|---|---|---|---|---|---|
| Lab ID | | AC98757-001 | | | AC98757-002 | | |
| Date | | 6/28/2017 | | | 6/29/2017 | | |
| Matrix | | Groundwater | | | Groundwater | | |
| Well Depth (feet bgs) | | 18.50 | | | 19.75 | | |
| Units | | ug/L | | | ug/L | | |
| | | Result | Q | RL | Result | Q | RL |
| **Semi-Volatile Organic Compounds (SVOCs)** | | | | | | | |
| 1,1'-Biphenyl | 5 | | U | 2 | | U | **6** |
| 1,2,4,5-Tetrachlorobenzene | 10 | | U | 2 | | U | 6 |
| 2,3,4,6-Tetrachlorophenol | - | | U | 2 | | U | 6 |
| 2,4,5-Trichlorophenol | 1 | | U | **2** | | U | **6** |
| 2,4,6-Trichlorophenol | 1 | | U | **2** | | U | **6** |
| 2,4-Dichlorophenol | 1 | | U | 0.8 | | U | 2.4 |
| 2,4-Dimethylphenol | 1 | **3.7** | | 0.5 | **10** | | 1.5 |
| 2,4-Dinitrophenol | 1 | | U | **10** | | U | **30** |
| 2,4-Dinitrotoluene | 5 | | U | 2 | | U | **6** |
| 2,6-Dinitrotoluene | 5 | | U | 2 | | U | **6** |
| 2-Chloronaphthalene | 5 | | U | 2 | | U | **6** |
| 2-Chlorophenol | 1 | | U | **2** | | U | **6** |
| 2-Methylnaphthalene | - | 86 | | 2 | 120 | | 6 |
| 2-Methylphenol | 1 | | U | 0.5 | | U | 1.5 |
| 2-Nitroaniline | 5 | | U | 2 | | U | **6** |
| 2-Nitrophenol | 1 | | U | **2** | | U | **6** |
| 3&4-Methylphenol | 1 | | U | 0.5 | | U | **1.5** |
| 3,3'-Dichlorobenzidine | 5 | | U | 2 | | U | **6** |
| 3-Nitroaniline | 5 | | U | 2 | | U | **6** |
| 4,6-Dinitro-2-methylphenol | 1 | | U | **10** | | U | **30** |
| 4-Bromophenyl-phenylether | - | | U | 2 | | U | 6 |
| 4-Chloro-3-methylphenol | 1 | | U | **2** | | U | **6** |
| 4-Chloroaniline | 5 | | U | 0.5 | | U | 1.5 |
| 4-Chlorophenyl-phenylether | - | | U | 2 | | U | 6 |
| 4-Nitroaniline | 5 | | U | 2 | | U | **6** |
| 4-Nitrophenol | 1 | | U | **2** | | U | **6** |
| Acenaphthene | 20 | | U | 2 | | U | 6 |
| Acenaphthylene | - | | U | 2 | | U | 6 |
| Acetophenone | - | | U | 2 | | U | 6 |
| Anthracene | 50 | | U | 2 | | U | 6 |
| Atrazine | 7.5 | | U | 2 | | U | 6 |
| Benzaldehyde | - | | U | 2 | | U | 6 |
| Benzo[a]anthracene | 0.002 | | U | **2** | | U | **6** |
| Benzo[a]pyrene | ND | | U | 2 | | U | 6 |
| Benzo[b]fluoranthene | 0.002 | | U | **2** | | U | **6** |
| Benzo[g,h,i]perylene | - | | U | 2 | | U | 6 |
| Benzo[k]fluoranthene | 0.002 | | U | **2** | | U | **6** |
| bis(2-Chloroethoxy)methane | 5 | | U | 2 | | U | **6** |
| bis(2-Chloroethyl)ether | 1 | | U | 0.5 | | U | **1.5** |
| bis(2-Chloroisopropyl)ether | 5 | | U | 2 | | U | **6** |
| bis(2-Ethylhexyl)phthalate | 5 | | U | 2 | | U | **6** |
| Butylbenzylphthalate | - | | U | 2 | | U | 6 |
| Caprolactam | - | | U | 2 | | U | 6 |
| Carbazole | - | | U | 2 | | U | 6 |
| Chrysene | 0.002 | | U | **2** | | U | **6** |
| Dibenzo[a,h]anthracene | - | | U | 2 | | U | 6 |
| Dibenzofuran | - | | U | 0.5 | | U | 1.5 |
| Diethylphthalate | 50 | | U | 2 | | U | 6 |
| Dimethylphthalate | - | | U | 2 | | U | 6 |
| Di-n-butylphthalate | 50 | | U | 0.5 | | U | 1.5 |
| Di-n-octylphthalate | - | | U | 2 | | U | 6 |
| Fluoranthene | 50 | | U | 2 | | U | 6 |
| Fluorene | 50 | | U | 2 | | U | 6 |
| Hexachlorobenzene | 0.04 | | U | **2** | | U | **6** |
| Hexachlorobutadiene | 0.5 | | U | **2** | | U | **6** |
| Hexachlorocyclopentadiene | 5 | | U | 2 | | U | **6** |
| Hexachloroethane | 5 | | U | 2 | | U | **6** |
| Indeno[1,2,3-cd]pyrene | 0.002 | | U | **2** | | U | **6** |
| Isophorone | 50 | | U | 2 | | U | 6 |
| Naphthalene | 10 | **87** | | 0.5 | **160** | | 1.5 |
| Nitrobenzene | 0.4 | | U | 2 | | U | 6 |
| N-Nitroso-di-n-propylamine | - | | U | 0.5 | | U | 1.5 |
| N-Nitrosodiphenylamine | 50 | | U | 2 | | U | 6 |
| Pentachlorophenol | 1 | | U | **10** | | U | **30** |
| Phenanthrene | 50 | | U | 2 | | U | 6 |
| Phenol | 1 | **4.6** | | **2** | | U | **6** |
| Pyrene | 50 | | U | 2 | | U | 6 |
| **Metals** | | | | | | | |
| Lead | 25 | **33** | | 3 | **27** | | 3 |

**Notes:**

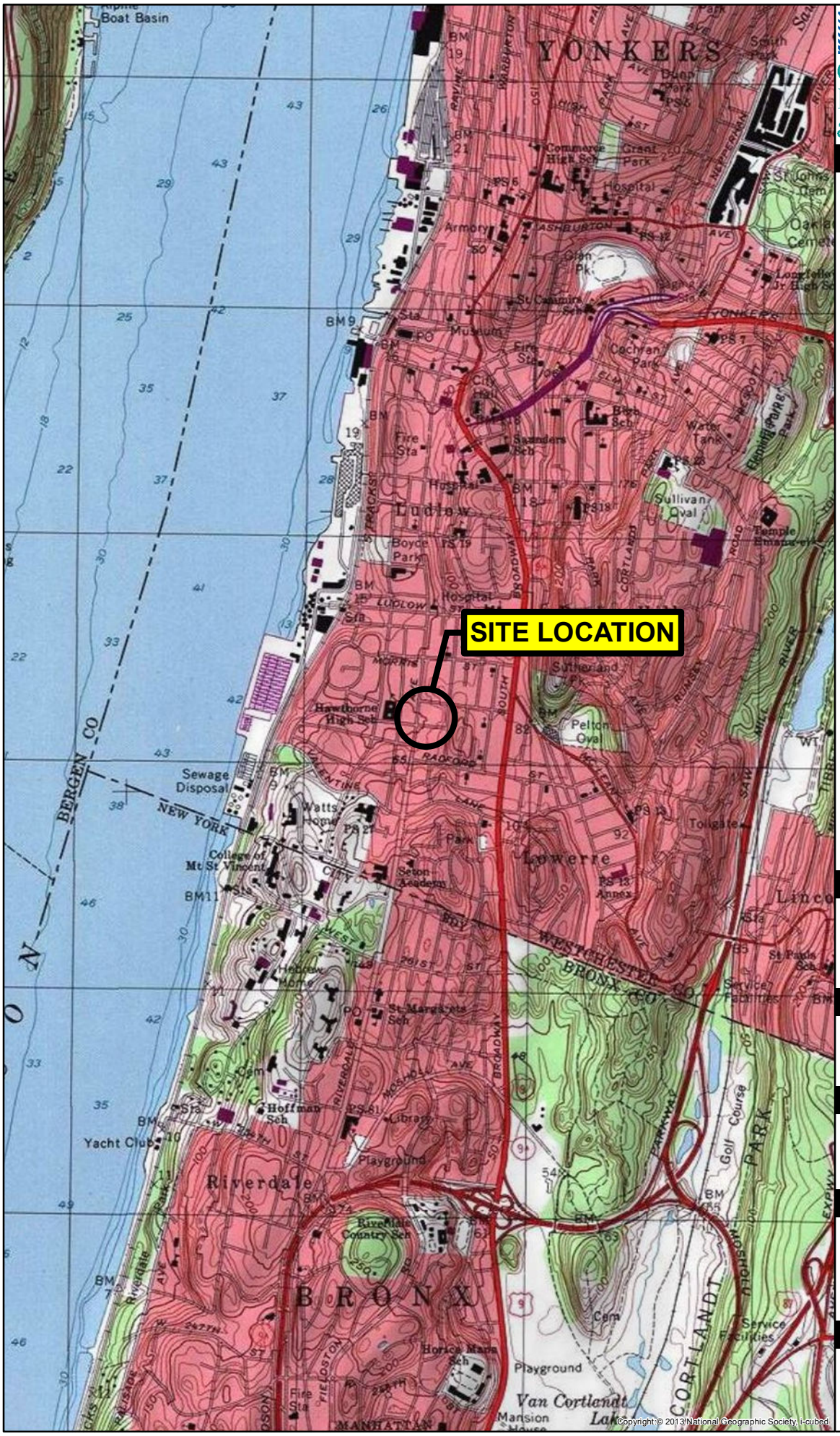
Q = Data Qualifier
U = Not Detected
NA = Not Analyzed
All concentrations are in micrograms per liter (µg/L)
**140** = concentration exceeds NYSDEC Ambient Water Quality Standards (AWQS)
**10** = reporting limit exceeds most stringent NYSDEC Ambient Water Quality Standards
J = Estimated Value
RL = Reporting Limit

**FIGURES**

Figure 1 - Site Location Map
Figure 2 - Site Plan
Figure 3A - REC Plan

Figure 4 - Soil Boring Location Plan
Figure 5A – Soil Sampling Exceedance Results Plan
Figure 5B – Soil Sampling Exceedance Results Plan
Figure 6 – Groundwater Sampling Exceedance Results Plan

Phase II Limited Subsurface Investigation
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

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## Regional Locator Map




Notes

1. Data Source: 2013 National Geographic Society, i-cubed
2. USGS Quad Name: Yonkers, New York
3. Latitude: 40°55'10.7"N
   Longitude: 73°54'02.9"W

## Scale and Orientation

0 1,000 2,000

1 inch = 2,000 feet

## Prepared For

CVS Pharmacy, Inc
One CVS Drive
Woonsocket, Rhode Island

## Prepared For

T.M. Crowley & Associates, Inc.
501 Pennsylvania Parkway, Suite 160
Indianapolis, Indiana 46280

## Site Address

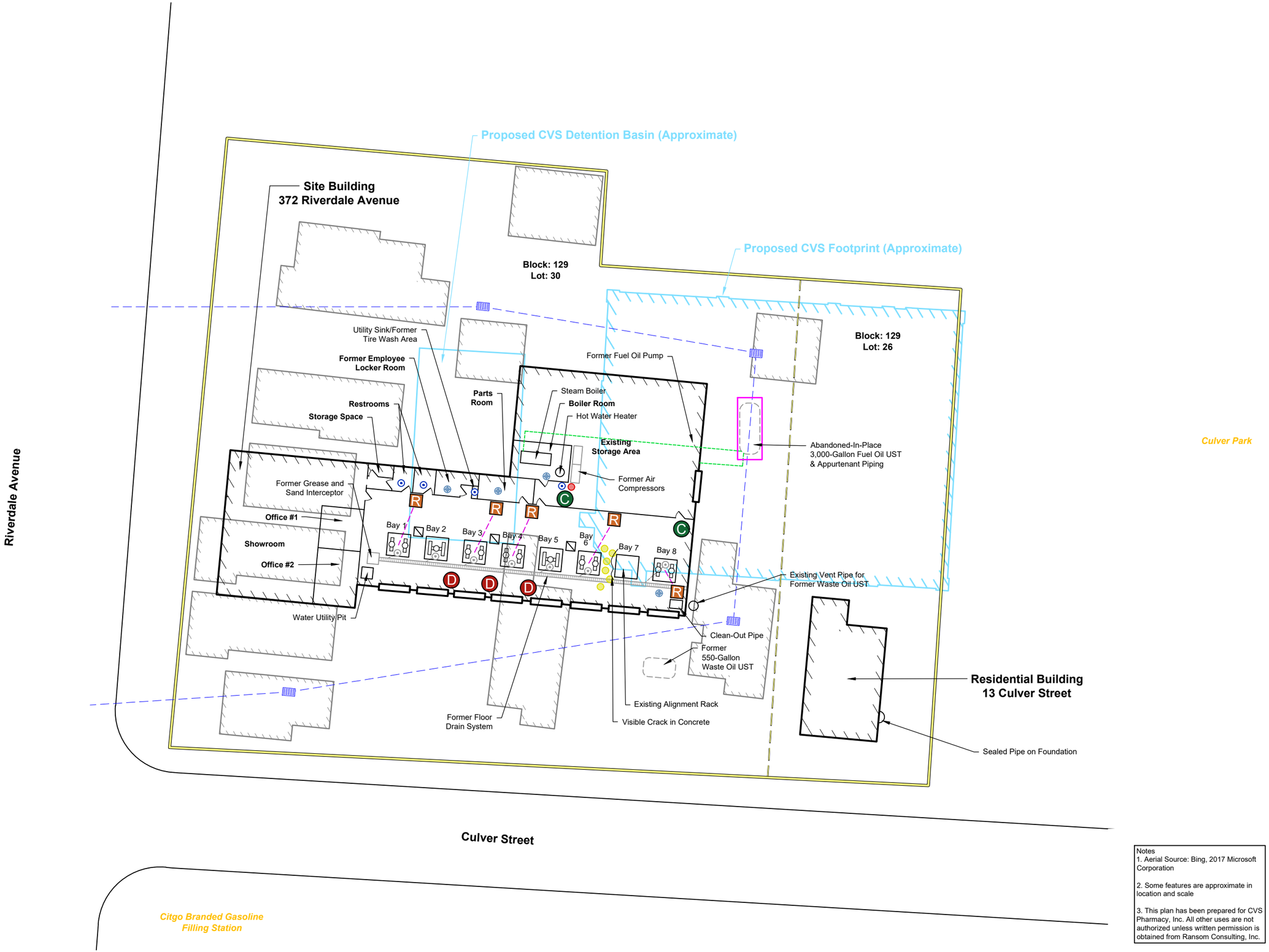
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

111.02013 | May 2017

# Figure 1

Site Location Map

PM File: CVS_YONKERS_NY-F1_SLM.mxd




Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation

2. Some features are approximate in location and scale

3. This plan has been prepared for CVS Pharmacy, Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

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## Legend & Notes

- Parcel Boundary
- Overhead Garage Door
- Stormwater Catch Basin
- Stormwater Line
- Hydraulic Oil Line
- Active Floor Drain
- Former Floor Drain
- Sealed Floor Drain
- Air Filter
- Hydraulic Lift Control Box
- Hydraulic Fluid Reservoir
- Compressor
- 55-Gallon Waste Oil Storage Drum
- Former 55-Gallon Waste Oil Drum Storage Area
- Hydraulic Lift (Single Post)
- Hydraulic Lift (Double Post)
- Geophysical Metallic Anomaly
- Former Residential Structure
- Proposed CVS Pharmacy Store
- Proposed CVS Pharmacy Site Features

## Scale and Orientation

0 15 30
1 inch = 30 feet

## Prepared For

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island
02895-6146

## Prepared For

T.M. Crowley & Associates, Inc.
501 Pennsylvania Parkway, Suite 160
Indianapolis, Indiana 46280

## Site Address

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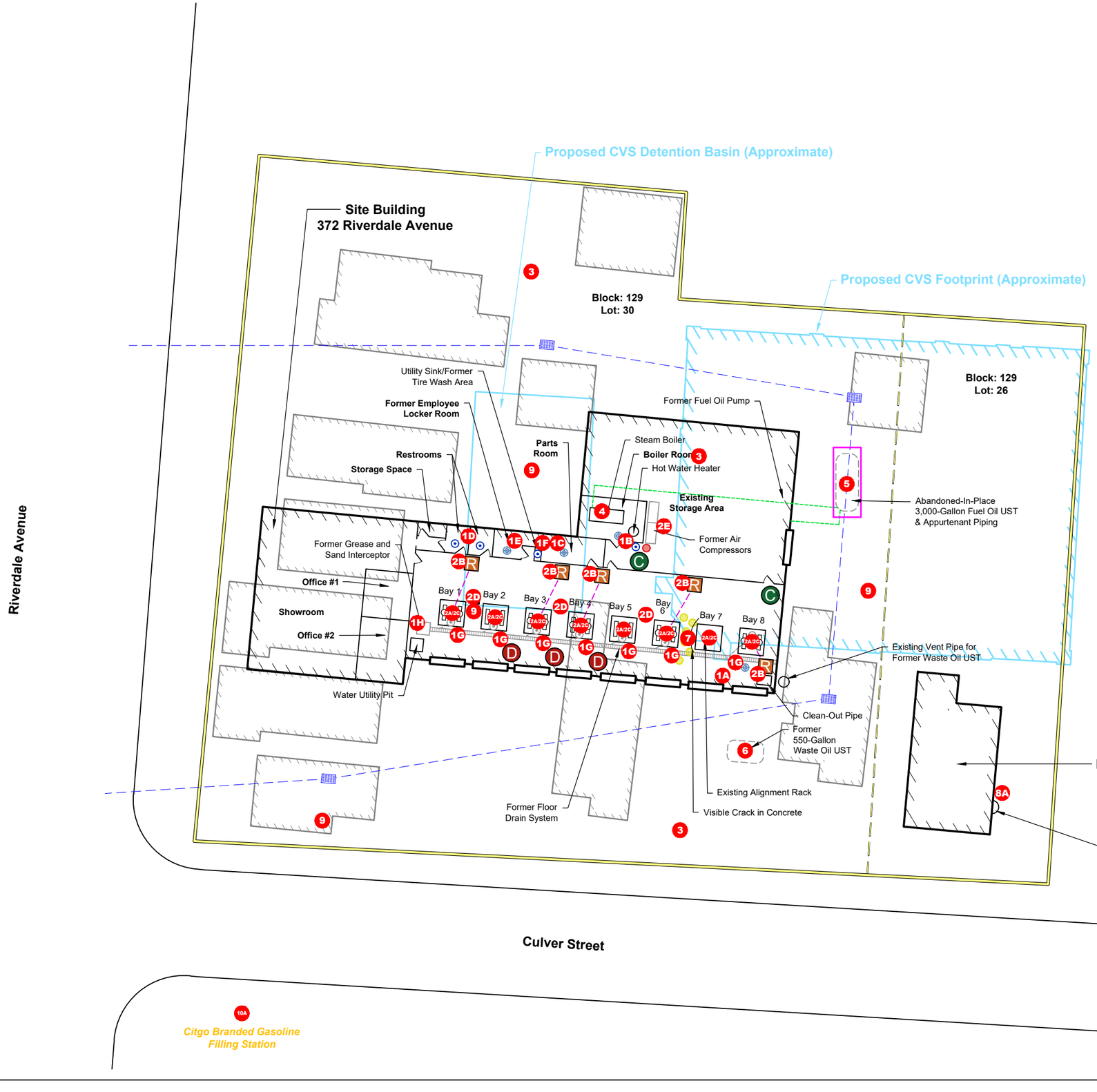
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

111.02013 | July 2017

Figure 2

Site Plan

File: CVS_YONKERS_NY_REPORT.dwg Date: 07/20/2017




***REC 1 – Automotive Repair Drainage Systems***

- 1A Service Garage Sealed Floor Drain
- 1B Boiler Room Sealed Floor Drain
- 1C Parts Room Sealed Floor Drain
- 1D Bathroom Floor Drains
- 1E Employee Locker Room Sealed Floor Drain
- 1F Tire Wash Area Floor Drain
- 1G Former Hydraulic Lift Floor Drains
- 1H Former Grease and Sand Interceptor

***REC 2 – Automotive Repair Hydraulic Lift Systems***

- 2A Hydraulic Lifts and Alignment Rack
- 2B Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes
- 2C Former Hydraulic Lifts, Air/Hydraulic Alignment Rack and Underground Hydraulic Oil Reservoirs
- 2D Hydraulic Lift Control Boxes
- 2E Former Air Compressors
- 3 Vehicle Storage
- 4 Inactive Oil-Fired Boiler System
- 5 Former 3,000-gallon Fuel Oil UST
- 6 Former 550-gallon Waste Oil UST
- 7 55-Gallon Waste Oil Drum Storage

***REC 8 – Current/Former Residential Use***

- 8A Known Fuel Oil Use at Residential Building
- 8B Former Residential Use. (Not Depicted on Map)
- 9 Observed Historic Fill

***REC 10 – Potential Off-Site Sources***

- 10A Off-Site Citgo Service Station
- 10B Off-Site Devonshire Discount Tire, Auto Body & Repair Center (Not Depicted on Map)
- 10C Former Riverdale Auto Service Inc. (Not Depicted on Map)

Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation

2. Some features are approximate in location and scale

3. This plan has been prepared for CVS Pharmacy, Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

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## Legend & Notes

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- Proposed CVS Pharmacy Store
- Proposed CVS Pharmacy Site Features

## Scale and Orientation

0 15 30

1 inch = 30 feet

## Prepared For

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island
02895-6146

## Prepared For

T.M. Crowley & Associates, Inc.
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Indianapolis, Indiana 46280

## Site Address

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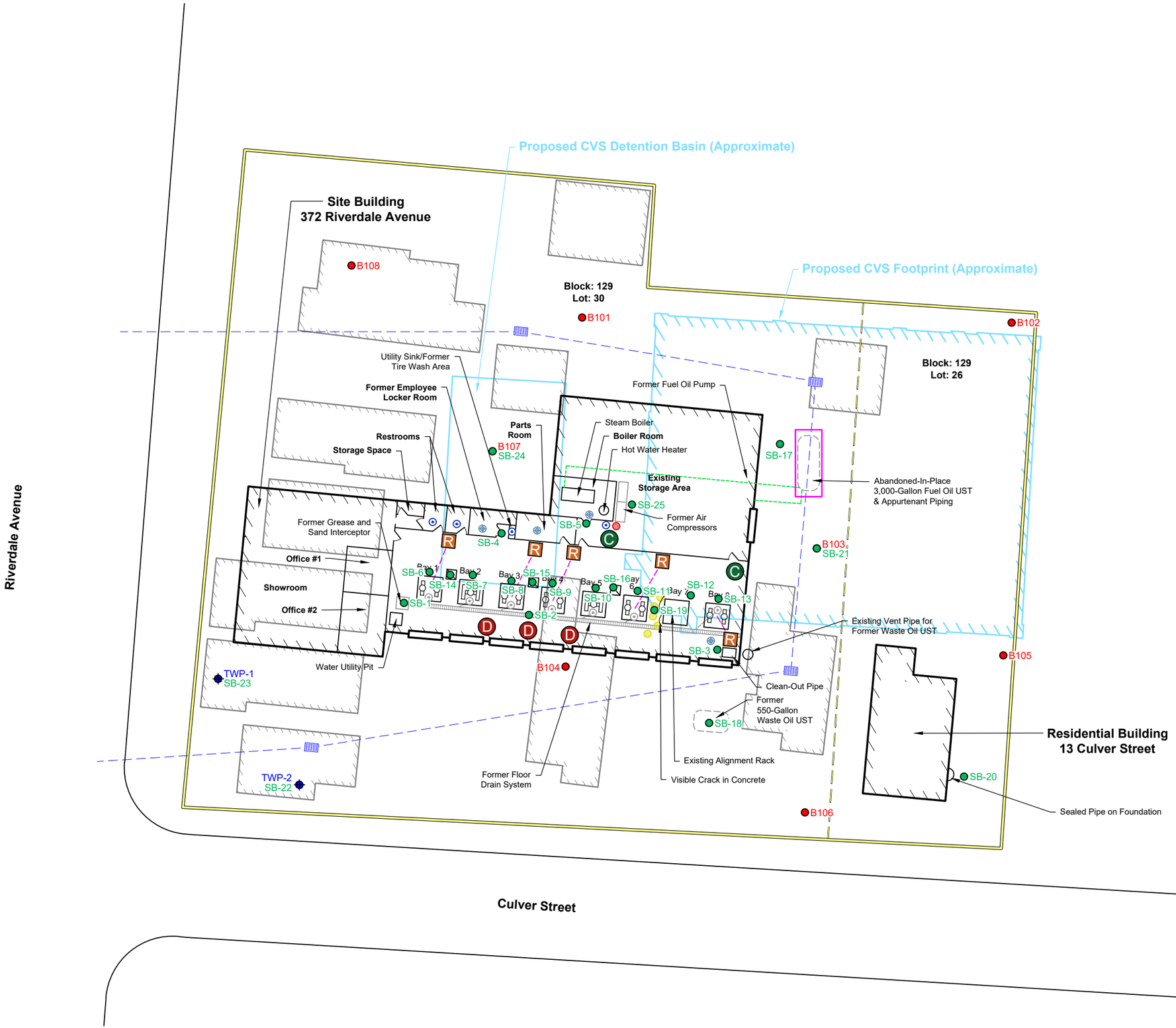
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

111.02013 | July 2017

Figure 3

Recognized Environmental Concern Plan

File: CVS_YONKERS_NY_REPORT.dwg Date: 07/20/2017




Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation

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## Legend & Notes

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- 55-Gallon Waste Oil Storage Drum
- Former 55-Gallon Waste Oil Drum Storage Area
- Hydraulic Lift (Single Post)
- Hydraulic Lift (Double Post)
- Geophysical Metallic Anomaly
- Former Residential Structure
- Proposed CVS Pharmacy Store
- Proposed CVS Pharmacy Site Features
- Approximate Soil Boring
- Temporary Well Point Location
- Geotechnical Boring

## Scale and Orientation

0 15 30

1 inch = 30 feet

## Prepared For

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island
02895-6146

## Prepared For

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## Site Address

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Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

111.02013 | July 2017

Figure 4

Soil Boring Location Map

File: CVS_YONKERS_NY_REPORT.dwg Date: 07/20/2017

| Sample ID | SB-14A |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.51 |
| Benzo[a]pyrene | 0.48 |
| Benzo[b]fluoranthene | 0.69 |
| Chrysene | 0.54 |
| Indeno[1,2,3-cd]pyrene | 0.31 |

| Sample ID | SB-6A |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.63 |
| Benzo[a]pyrene | 0.68 |
| Benzo[b]fluoranthene | 1 |
| Chrysene | 0.77 |
| Indeno[1,2,3-cd]pyrene | 0.47 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | 0.059 |

| Sample ID | SB-6B |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-7 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.5-9.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-14B |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 1.5-2.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.61 |
| Benzo[a]pyrene | 0.61 |
| Benzo[b]fluoranthene | 0.86 |
| Chrysene | 0.71 |
| Indeno[1,2,3-cd]pyrene | 0.42 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | **0.16** |
| **Metals** | |
| Arsenic | 7.9 |
| Barium | 320 |
| Cadmium | **3.7** |
| Total Chromium* | **36** |
| Copper | **4,900** |
| Lead | **720** |
| Manganese | 300 |
| Total Mercury | **3** |
| Nickel | 20 |
| Zinc | **580** |

| Sample ID | SB-8A |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.52 |
| Benzo[a]pyrene | 0.5 |
| Benzo[b]fluoranthene | 0.7 |
| Chrysene | 0.53 |
| Indeno[1,2,3-cd]pyrene | 0.29 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-8B |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-9A |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 1.3 |
| Benzo[a]pyrene | **1.2** |
| Benzo[b]fluoranthene | **1.7** |
| Chrysene | 1.2 |
| Indeno[1,2,3-cd]pyrene | **0.74** |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-9B |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-13A |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.091 |
| Benzo[a]pyrene | 0.092 |
| Benzo[b]fluoranthene | 0.14 |
| Chrysene | 0.11 |
| Indeno[1,2,3-cd]pyrene | 0.06 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-13B |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

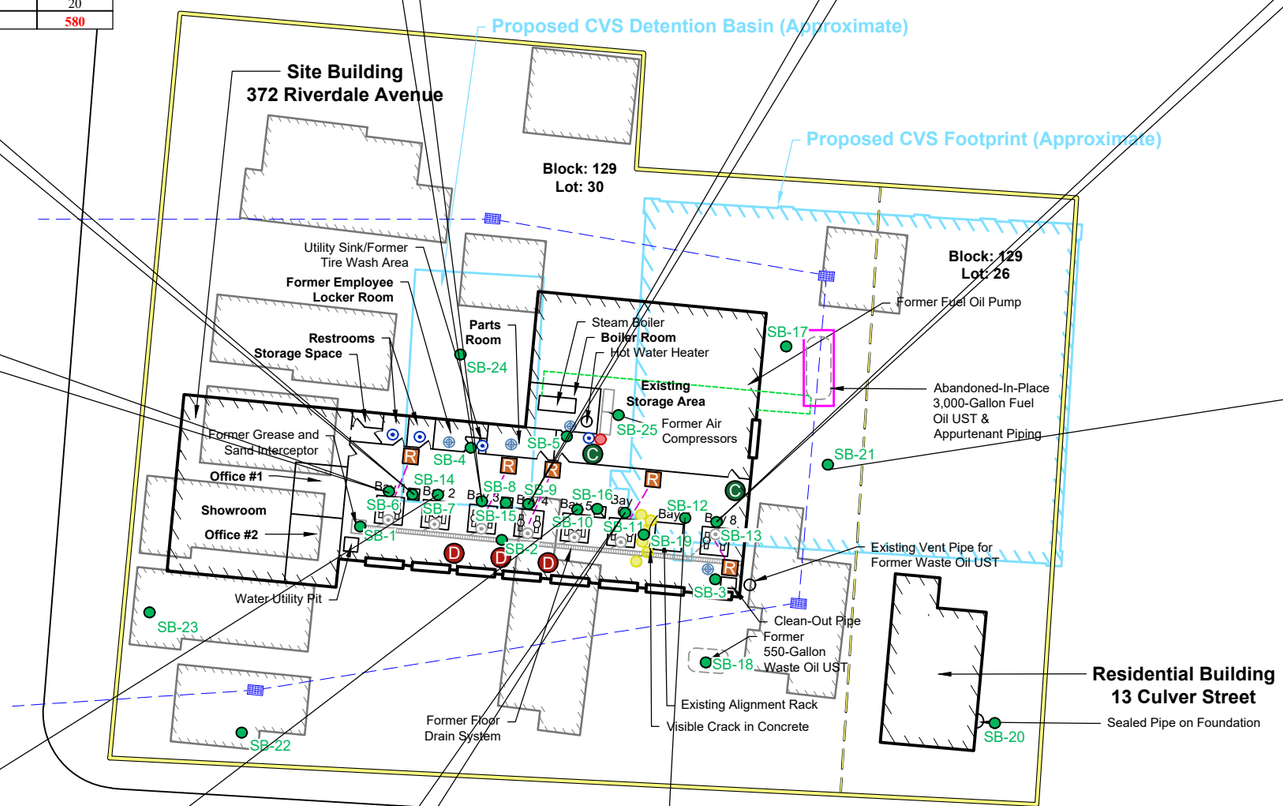
| Sample ID | SB-21 |
|---|---|
| Date Sampled | 6/28/2017 |
| Sample Interval (feet bgs) | 2.5-3.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.086 |
| Benzo[a]pyrene | 0.074 |
| Benzo[b]fluoranthene | 0.1 |
| Chrysene | 0.094 |
| Indeno[1,2,3-cd]pyrene | 0.045 |
| **Metals** | |
| Arsenic | **27** |
| Barium | 110 |
| Cadmium | ND |
| Total Chromium* | **30** |
| Copper | **87** |
| Lead | **100** |
| Manganese | 310 |
| Total Mercury | **28** |
| Nickel | 19 |
| Zinc | **110** |
| **Pesticides** | |
| p,p'-DDD | ND |
| p,p'-DDE | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-10 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.5-9.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-11A |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.042 |
| Benzo[a]pyrene | 0.043 |
| Benzo[b]fluoranthene | 0.056 |
| Chrysene | 0.044 |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-11B |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-12 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |




| Compound | NYSDEC Unrestricted Use SCO(mg/kg) | NYSDEC Protection of Groundwater SCO (mg/kg) |
|---|---|---|
| **Volatile Organic Compounds** | | |
| Acetone | **0.05** | 0.05 |
| **Polyaromatic Hydrocarbons** | | |
| Benzo(a)anthracene | **1** | 1 |
| Benzo[a]pyrene | **1** | 22 |
| Benzo[b]fluoranthene | **1** | 1.7 |
| Chrysene | **1** | 1 |
| Indeno[1,2,3-cd]pyrene | **0.5** | 8.2 |
| **Metals** | | |
| Arsenic | **13** | 16 |
| Barium | **350** | 820 |
| Cadmium | **2.5** | 7.5 |
| Chromium** | **30/1** | -/19 |
| Copper | **50** | 1,720 |
| Lead | **63** | 450 |
| Manganese | **1,600** | 2,000 |
| Total Mercury | **0.18** | 0.73 |
| Nickel | **30** | 130 |
| Zinc | **109** | 2,480 |
| **Pesticides** | | |
| p,p'-DDD | **0.0033** | 14 |
| p,p'-DDE | **0.0033** | 17 |
| **Polychlorinated Biphenyls** | | |
| Aroclor (Total) | **0.1** | 3.2 |

**Notes:**
- ND = Not Detected
- NA = Not Analyzed
- **10** = Concentration in exceedance of most stringent SCO
- SCO = Soil Cleanup Objective
- VOCs = Volatile Organic Compounds
- Note: All concentrations are in milligrams per kilogram (mg/kg). Compounds not analyzed are not depicted on this map.
- * The SCOs listed for Total Chromium are the trivalent chromium SCOs and hexavalent chromium SCOs, respectively, as total chromium does not have an established SCO.

Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation

2. Some features are approximate in location and scale

3. This plan has been prepared for CVS Pharmacy, Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

RANSOM Consulting Engineers and Scientists

## Legend & Notes

- Parcel Boundary
- Overhead Garage Door
- Stormwater Catch Basin
- Stormwater Line
- Hydraulic Oil Line
- Active Floor Drain
- Former Floor Drain
- Sealed Floor Drain
- Air Filter
- Hydraulic Lift Control Box
- Hydraulic Fluid Reservoir
- Compressor
- 55-Gallon Waste Oil Storage Drum
- Former 55-Gallon Waste Oil Drum Storage Area
- Hydraulic Lift (Single Post)
- Hydraulic Lift (Double Post)
- Geophysical Metallic Anomaly
- Former Residential Structure
- Proposed CVS Pharmacy Store
- Proposed CVS Pharmacy Site Features
- Approximate Soil Boring

## Scale and Orientation

0 20 40

1 inch = 40 feet

## Prepared For

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island
02895-6146

## Prepared For

T.M. Crowley & Associates, Inc.
501 Pennsylvania Parkway, Suite 160
Indianapolis, Indiana 46280

## Site Address

Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

**111.02013** | **July 2017**

Figure 5A

Soil Sampling Exceedance Results Plan

File: CVS_YONKERS_NY_REPORT.dwg Date: 07/20/2017

| Sample ID | SB-2 |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.44 |
| Benzo[a]pyrene | 0.45 |
| Benzo[b]fluoranthene | 0.59 |
| Chrysene | 0.43 |
| Indeno[1,2,3-cd]pyrene | 0.28 |
| **Metals** | |
| Arsenic | 6.6 |
| Barium | 160 |
| Cadmium | 1.2 |
| Total Chromium* | **23** |
| Copper | **61** |
| Lead | **520** |
| Manganese | 360 |
| Total Mercury | **1.9** |
| Nickel | 18 |
| Zinc | **300** |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-15 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.61 |
| Benzo[a]pyrene | 0.6 |
| Benzo[b]fluoranthene | 0.9 |
| Chrysene | 0.71 |
| Indeno[1,2,3-cd]pyrene | 0.39 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | 0.04 |

| Sample ID | SB-24 |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | **0.25** |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.55 |
| Benzo[a]pyrene | 0.78 |
| Benzo[b]fluoranthene | 0.64 |
| Chrysene | 0.82 |
| Indeno[1,2,3-cd]pyrene | 0.39 |
| **Metals** | |
| Arsenic | 13 |
| Barium | **750** |
| Cadmium | **4.2** |
| Total Chromium* | **45** |
| Copper | **140** |
| Lead | **4,300** |
| Manganese | 670 |
| Total Mercury | **0.89** |
| Nickel | **36** |
| Zinc | **1,500** |
| **Pesticides** | |
| p,p'-DDD | **0.028** |
| p,p'-DDE | **0.011** |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | 0.064 |

| Sample ID | SB-25 |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | 0.04 |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Metals** | |
| Arsenic | 6.2 |
| Barium | 140 |
| Cadmium | ND |
| Total Chromium* | **32** |
| Copper | 31 |
| Lead | **260** |
| Manganese | 930 |
| Total Mercury | **0.25** |
| Nickel | 28 |
| Zinc | **120** |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-19 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.59 |
| Benzo[a]pyrene | 0.51 |
| Benzo[b]fluoranthene | 0.69 |
| Chrysene | 0.53 |
| Indeno[1,2,3-cd]pyrene | 0.33 |
| **Metals** | |
| Arsenic | 3.8 |
| Barium | 60 |
| Cadmium | ND |
| Total Chromium* | **13** |
| Copper | 24 |
| Lead | **130** |
| Manganese | 310 |
| Total Mercury | **0.33** |
| Nickel | 12 |
| Zinc | 69 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

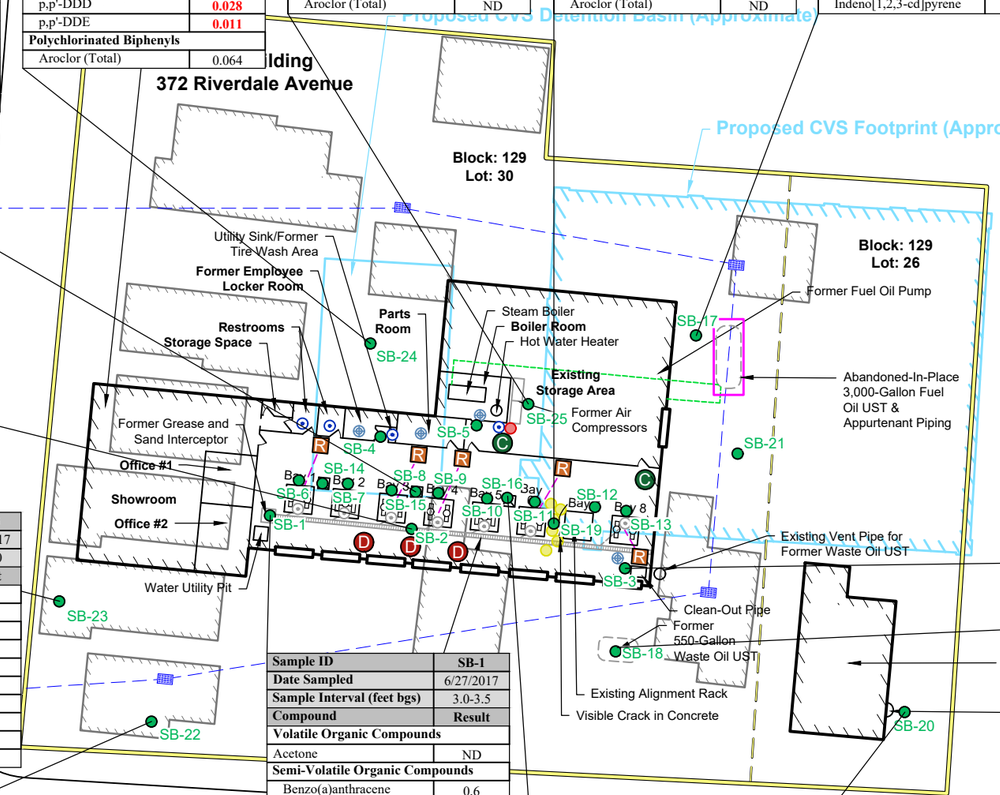
| Sample ID | SB-17 |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |

| Sample ID | SB-3 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Metals** | |
| Arsenic | 1.7 |
| Barium | 76 |
| Cadmium | ND |
| Total Chromium* | **17** |
| Copper | 13 |
| Lead | 63 |
| Manganese | 290 |
| Total Mercury | 0.13 |
| Nickel | 13 |
| Zinc | 62 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Compound | NYSDEC Unrestricted Use SCO(mg/kg) | NYSDEC Protection of Groundwater SCO (mg/kg) |
|---|---|---|
| **Volatile Organic Compounds** | | |
| Acetone | **0.05** | 0.05 |
| **Polyaromatic Hydrocarbons** | | |
| Benzo(a)anthracene | **1** | 1 |
| Benzo[a]pyrene | **1** | 22 |
| Benzo[b]fluoranthene | **1** | 1.7 |
| Chrysene | **1** | 1 |
| Indeno[1,2,3-cd]pyrene | **0.5** | 8.2 |
| **Metals** | | |
| Arsenic | **13** | 16 |
| Barium | **350** | 820 |
| Cadmium | **2.5** | 7.5 |
| Chromium** | **30/1** | -/19 |
| Copper | **50** | 1,720 |
| Lead | **63** | 450 |
| Manganese | **1,600** | 2,000 |
| Total Mercury | **0.18** | 0.73 |
| Nickel | **30** | 130 |
| Zinc | **109** | 2,480 |
| **Pesticides** | | |
| p,p'-DDD | **0.0033** | 14 |
| p,p'-DDE | **0.0033** | 17 |
| **Polychlorinated Biphenyls** | | |
| Aroclor (Total) | **0.1** | 3.2 |

**Notes:**

ND = Not Detected
NA = Not Analyzed
**10** = Concentration in exceedance of most stringent SCO
SCO = Soil Cleanup Objective
VOCs = Volatile Organic Compounds
Note: All concentrations are in milligrams per kilogram (mg/kg) Compounds not analyzed are not depicted on this map.
* The SCOs listed for Total Chromium are the trivalent chromium SCOs and hexavalent chromium SCOs, respectively, as total chromium does not have an established SCO.




| Sample ID | SB-23 |
|---|---|
| Date Sampled | 6/28/2017 |
| Sample Interval (feet bgs) | 3.5-4.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.24 |
| Benzo[a]pyrene | 0.2 |
| Benzo[b]fluoranthene | 0.26 |
| Chrysene | 0.23 |
| Indeno[1,2,3-cd]pyrene | 0.095 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-22 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 1.0-1.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Metals** | |
| Arsenic | 2.6 |
| Barium | 170 |
| Cadmium | ND |
| Total Chromium* | 29 |
| Copper | **29** |
| Lead | **280** |
| Manganese | 290 |
| Total Mercury | **0.54** |
| Nickel | 20 |
| Zinc | **180** |

| Sample ID | SB-1 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 3.0-3.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.6 |
| Benzo[a]pyrene | 0.5 |
| Benzo[b]fluoranthene | 0.73 |
| Chrysene | 0.61 |
| Indeno[1,2,3-cd]pyrene | 0.3 |
| **Metals** | |
| Arsenic | 5.3 |
| Barium | **360** |
| Cadmium | 1.9 |
| Total Chromium* | **78** |
| Copper | **69** |
| Lead | **620** |
| Manganese | 330 |
| Total Mercury | **0.8** |
| Nickel | 25 |
| Zinc | **410** |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | 0.5 |

| Sample ID | SB-16 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.038 |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | 0.048 |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-20 |
|---|---|
| Date Sampled | 6/28/2017 |
| Sample Interval (feet bgs) | 0.0-0.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | **1.7** |
| Benzo[a]pyrene | **1.5** |
| Benzo[b]fluoranthene | **1.9** |
| Chrysene | **1.6** |
| Indeno[1,2,3-cd]pyrene | **0.98** |

| Sample ID | SB-18 |
|---|---|
| Date Sampled | 6/28/2017 |
| Sample Interval (feet bgs) | 7.0-7.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Metals** | |
| Arsenic | 1.6 |
| Barium | 120 |
| Cadmium | ND |
| Total Chromium* | **31** |
| Copper | 38 |
| Lead | 20 |
| Manganese | **1,800** |
| Total Mercury | ND |
| Nickel | 29 |
| Zinc | 75 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation

2. Some features are approximate in location and scale

3. This plan has been prepared for CVS Pharmacy, Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

RANSOM Consulting Engineers and Scientists

## Legend & Notes

- Parcel Boundary
- Overhead Garage Door
- Stormwater Catch Basin
- Stormwater Line
- Hydraulic Oil Line
- Active Floor Drain
- Former Floor Drain
- Sealed Floor Drain
- Air Filter
- Hydraulic Lift Control Box
- Hydraulic Fluid Reservoir
- Compressor
- 55-Gallon Waste Oil Storage Drum
- Former 55-Gallon Waste Oil Drum Storage Area
- Hydraulic Lift (Single Post)
- Hydraulic Lift (Double Post)
- Geophysical Metallic Anomaly
- Former Residential Structure
- Proposed CVS Pharmacy Store
- Proposed CVS Pharmacy Site Features
- Approximate Soil Boring

## Scale and Orientation

0 20 40
1 inch = 40 feet

## Prepared For

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island
02895-6146

## Prepared For

T.M. Crowley & Associates, Inc.
501 Pennsylvania Parkway, Suite 160
Indianapolis, Indiana 46280

## Site Address

Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

**111.02013** | **July 2017**

Figure 5B

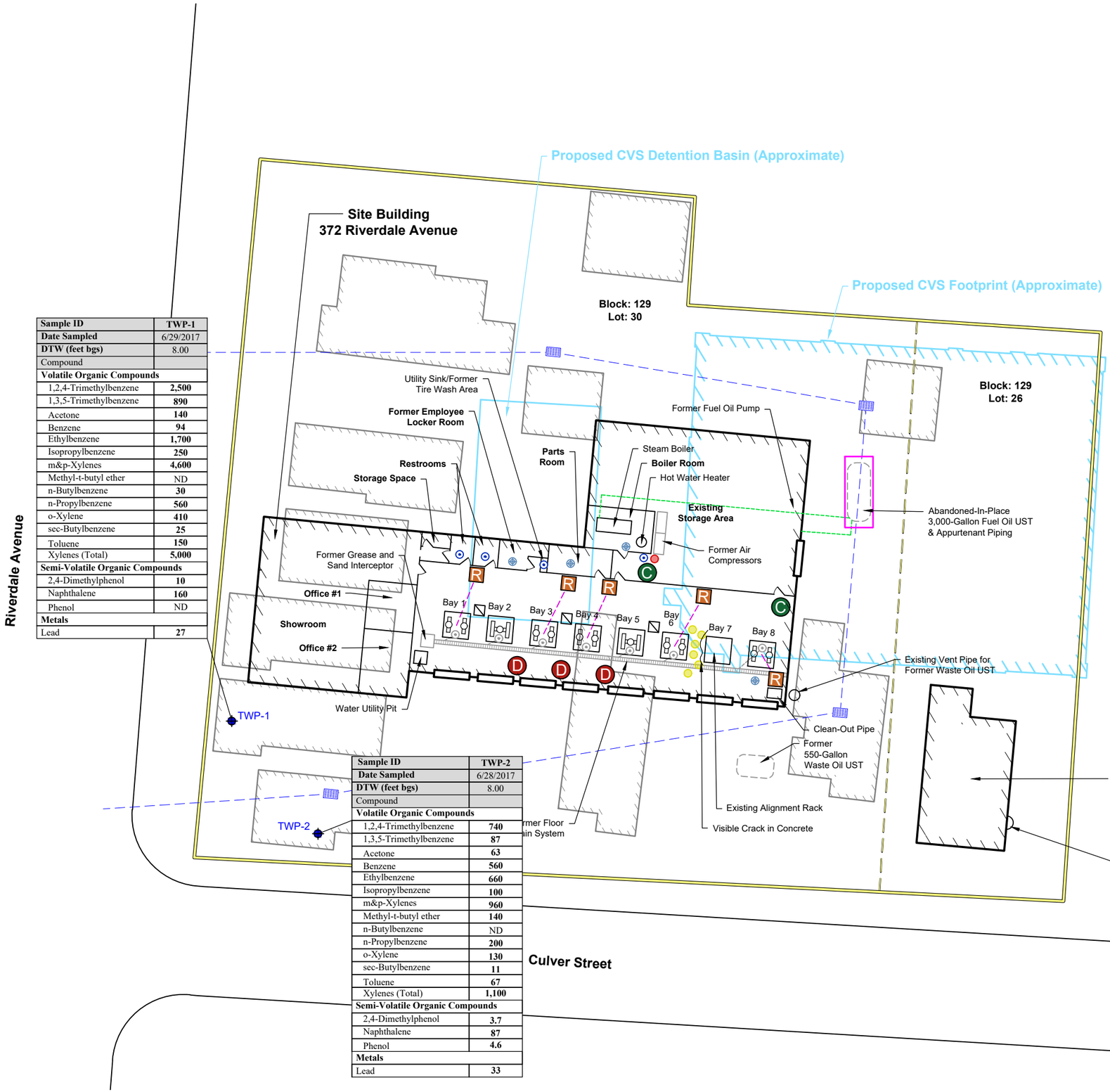
Soil Sampling Exceedance Results Plan

File: CVS_YONKERS_NY_REPORT.dwg Date: 07/20/2017

**Notes:**

Q = Data Qualifier
ND = Not Detected
NA = Not Analyzed
All concentrations are in micrograms/liter (µg/L)
**10** = Reporting Limit Exceeds Most Stringent AWQS
J = Estimated Value
RL = Reporting Limit
VOCs = Volatile Organic Compounds
AWQS = New York State Ambient Water Quality Standards
DTW = Depth to Water

| Compound | NYSDEC AWQS |
|---|---|
| **Volatile Organic Compounds** | |
| 1,2,4-Trimethylbenzene | 5 |
| 1,3,5-Trimethylbenzene | 5 |
| Acetone | 50 |
| Benzene | 1 |
| Ethylbenzene | 5 |
| Isopropylbenzene | 5 |
| m&p-Xylenes | 5 |
| Methyl-t-butyl ether | 10 |
| n-Butylbenzene | 5 |
| n-Propylbenzene | 5 |
| o-Xylene | 5 |
| sec-Butylbenzene | 5 |
| Toluene | 5 |
| Xylenes (Total) | |
| **Semi-Volatile Organic Compounds** | |
| 2,4-Dimethylphenol | 1 |
| Naphthalene | 10 |
| Phenol | 1 |
| **Metals** | |
| Lead | 25 |




| Sample ID | TWP-1 |
|---|---|
| **Date Sampled** | 6/29/2017 |
| **DTW (feet bgs)** | 8.00 |
| Compound | |
| **Volatile Organic Compounds** | |
| 1,2,4-Trimethylbenzene | **2,500** |
| 1,3,5-Trimethylbenzene | **890** |
| Acetone | **140** |
| Benzene | **94** |
| Ethylbenzene | **1,700** |
| Isopropylbenzene | **250** |
| m&p-Xylenes | **4,600** |
| Methyl-t-butyl ether | ND |
| n-Butylbenzene | **30** |
| n-Propylbenzene | **560** |
| o-Xylene | **410** |
| sec-Butylbenzene | **25** |
| Toluene | **150** |
| Xylenes (Total) | **5,000** |
| **Semi-Volatile Organic Compounds** | |
| 2,4-Dimethylphenol | **10** |
| Naphthalene | **160** |
| Phenol | ND |
| **Metals** | |
| Lead | **27** |

| Sample ID | TWP-2 |
|---|---|
| **Date Sampled** | 6/28/2017 |
| **DTW (feet bgs)** | 8.00 |
| Compound | |
| **Volatile Organic Compounds** | |
| 1,2,4-Trimethylbenzene | **740** |
| 1,3,5-Trimethylbenzene | **87** |
| Acetone | **63** |
| Benzene | **560** |
| Ethylbenzene | **660** |
| Isopropylbenzene | **100** |
| m&p-Xylenes | **960** |
| Methyl-t-butyl ether | **140** |
| n-Butylbenzene | ND |
| n-Propylbenzene | **200** |
| o-Xylene | **130** |
| sec-Butylbenzene | **11** |
| Toluene | **67** |
| Xylenes (Total) | **1,100** |
| **Semi-Volatile Organic Compounds** | |
| 2,4-Dimethylphenol | **3.7** |
| Naphthalene | **87** |
| Phenol | **4.6** |
| **Metals** | |
| Lead | **33** |

Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation

2. Some features are approximate in location and scale

3. This plan has been prepared for CVS Pharmacy, Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

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Consulting Engineers and Scientists

## Legend & Notes

- Parcel Boundary
- Overhead Garage Door
- Stormwater Catch Basin
- Stormwater Line
- Hydraulic Oil Line
- Active Floor Drain
- Former Floor Drain
- Sealed Floor Drain
- Air Filter
- Hydraulic Lift Control Box
- Hydraulic Fluid Reservoir
- Compressor
- 55-Gallon Waste Oil Storage Drum
- Former 55-Gallon Waste Oil Drum Storage Area
- Hydraulic Lift (Single Post)
- Hydraulic Lift (Double Post)
- Geophysical Metallic Anomaly
- Former Residential Structure
- Proposed CVS Pharmacy Store
- Proposed CVS Pharmacy Site Features
- Temporary Well Point Location

## Scale and Orientation

0 15 30
1 inch = 30 feet

## Prepared For

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island
02895-6146

## Prepared For

T.M. Crowley & Associates, Inc.
501 Pennsylvania Parkway, Suite 160
Indianapolis, Indiana 46280

## Site Address

Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

**111.02013** | **July 2017**

Figure 6

Groundwater Sampling Exceedance Results Plan

File: CVS_YONKERS_NY_REPORT.dwg Date: 07/20/2017

**APPENDIX A**

Geophysical Survey Report

Phase II Limited Subsurface Investigation
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

ADVANCED GEOLOGICAL SERVICES

Headquarters in Malvern, PA
Offices in Chillicothe, OH and
Moraga, CA

July 18, 2017
Reference: 17-175-1

Ms. Kimberly Skibo
Ransom Consulting, Inc.
2127 Hamilton Avenue
Hamilton, NJ 08619

**Subject:** Geophysical Investigation Results
372 Riverdale Avenue & 13 Culver Street
Yonkers, New York

Dear Ms. Skibo:

Advanced Geological Services (AGS) presents this letter to Ransom Consulting, Inc. (Ransom) summarizing the geophysical investigation completed by AGS on June 27 through 29, 2017 at the properties located at 372 Riverdale Avenue and 13 Culver Street in Yonkers, New York.

At the time of the investigation the property at 372 Riverdale Avenue was being actively used by an automobile repair business. Parked cars were tightly parked throughout large portions of the property. Also, the 13 Culver Street property was being used for parking and staging of several Taco Trucks, thereby limiting access of the entire site.

The objectives of the geophysical investigation were to utilize geophysical methods to:

1) Identify potential underground storage tanks (USTs), buried structures, areas of fill, and other potential features of environmental concern at the subject property.

2) Clear numerous proposed drilling location of identifiable utilities or potential drilling hazards.

3) Attempt to video image a floor drain system on the southern side of the 372 Riverdale building where the automobile repair lifts exist.

To achieve the project objectives, AGS utilized a combination of the terrain conductivity electromagnetic (EM) method, the ground penetrating radar (GPR) method, the radio frequency utility locating method, the hand-held (EM) metal detection method, and a pipe video imaging system.

## ***Methods***

### *Terrain Conductivity Electromagnetic (EM) Method*

Terrain conductivity EM data were collected across accessible portions of the geophysical investigation area to identify anomalous features that could indicate the presence of USTs, buried structures such as foundations or building slabs, or other anomalous subsurface features. The EM method uses the principle of electromagnetic induction to measure the variability of terrain conductivity of subsurface materials. The terrain conductivity EM method is capable of detecting variations in soil conductivity that can be caused by changes in soil

composition, soil compaction, or moisture content that are often associated with previously excavated or disturbed soils. The EM method also reacts very strongly to the presence of buried metal objects such as USTs, pipelines, or buried drums, as well a metallic features on the ground surface, such as parked cars, or building structures.

A Geonics EM31 terrain conductivity EM instrument was used to collect EM data in accessible portions of the 372 Riverdale Avenue property. The EM31 operates in accordance with the theory of operation at low induction numbers. An alternating current is passed through the transmitter coil to induce eddy currents into the ground. These eddy currents generate a secondary magnetic field. A component of the induced magnetic field is detected by a receiver coil and measured by the instrument. The receiver measures the field strength of both the quadrature and the in-phase components. The quadrature response is displayed as terrain conductivity in units of milliSeimens per meter (mS/m). The in-phase response is displayed in units of parts per thousand (ppt) of the transmitted signal. The estimated maximum depth of investigation of the EM31 instrument is up to approximately 18 feet below the ground surface.

Terrain conductivity EM data were collected along parallel traverses spaced 5 feet apart. Two EM measurements were recorded every second to provide a reading approximately every 1.5 feet along each traverse. The geographical coordinates of each reading was determined using a Trimble XH-3000 global positioning system (GPS) capable of sub-meter accuracy and was recorded along with the EM reading. Real-time navigation was also achieved using the GPS instrument.

Data were reviewed during data collection to identify potential targets of interest that would require additional investigation and characterization using GPR methods. Locations of anomalous features identified in the field were marked on site with spray paint. The EM data were downloaded upon return to the AGS office, contoured, and provided final review to identify any subtle features that may not have been recognized in the field.

*Ground Penetrating Radar (GPR) Method*

The ground penetrating radar (GPR) method was used to further characterize anomalies identified in the EM results, to search for USTs and other targets of interest, as well as to clear the area surrounding proposed drilling locations of buried utilities.

The GPR method is based upon the transmission of repetitive, radio-frequency electromagnetic (EM) pulses into the subsurface. When the transmitted energy of the down-going wave contacts an interface of dissimilar electrical character, part of the energy is returned to the surface in the form of a reflected signal. This reflected signal is detected by a receiving transducer and is displayed on the screen of the GPR unit as well as being recorded on the internal hard-drive. The received GPR response remains constant as long as the electrical contrast between media is present and constant. Lateral or vertical changes in the electrical properties of the subsurface result in equivalent changes in the GPR response. The system records a continuous image of the subsurface by plotting two-way travel time of the reflected EM pulse versus distance traveled along the ground surface. Two-way travel time values are

then converted to depth using known soil velocity functions.

A GSSI SIR-3000 GPR system and a 400 megahertz (MHz) antenna were used with a recording window of 60 nanoseconds (ns) to provide depth of penetration of up to approximately 10 feet under ideal field conditions. High conductivity soil, some conductive ballast gravels, and de-icing salt can strongly attenuate GPR signals, thereby decreasing the effective depth of investigation of the GPR system.

GPR data were collected select portions of the site to further characterize EM anomalies and to search for features of potential environmental concern. GPR traverses were also collected in an approximate grid pattern surrounding each proposed drilling location to identify potential utilities. Locations of identified features were marked on the ground surface with spray paint.

*Hand-Held Electromagnetic (EM) Metal Detection Method*

The hand-held EM metal detection method was used to search for metallic utilities, and other buried metal objects in the areas surrounding proposed drilling locations that could pose a drilling hazard. This instrument was also used to scan areas that could not be accessed with the larger EM31 instrument. Areas scanned included the 13 Culver Street property and several accessible portions of the 372 Riverdale Avenue property.

This EM method uses the principle of electromagnetic induction to detect shallow buried metal objects. This is done by carrying a unit consisting of hand-held radio frequency transmitter and receiver above the ground and continuously scanning the surface. A primary coil broadcasts a radio frequency signal from a transmitter. This primary radio signal induces secondary electrical currents in metal objects. These secondary currents in turn produce a magnetic field which is detected by the receiver.

The EM instrument used for this investigation was a Fisher TW-6 pipe and cable locator. This instrument is expressly designed to detect metallic pipes, cables, USTs, manhole covers, and other buried metallic objects. The instrument produces an audible response and significant meter deflections when near a metal object. The peak instrument response occurs when the unit is directly over the object. The EM instrument is ineffective in areas covered with reinforced concrete because the metal reinforcing material saturates the instrument response.

The TW-6 is operated in scanning mode, and does not allow for recording of the instrument response. For the present investigation, the accessible survey areas were scanned in a grid pattern to identify potential utilities, USTs, or other buried metal objects. Locations of potential utilities were marked on site with spray paint and/or pin flags.

*Radio Frequency (RF) Utility Locating Methods*

The areas surrounding proposed drilling locations were inspected using a RF utility locating system (also known as a precision utility locator (PUL)) to identify and trace potential electrical, telecommunication, water, and other potential identifiable utilities.

AGS utilized a Radiodetection RD4000 RF utility locating instrument. This instrument consists

of a receiver/tracer and a remote transmitter which operates at multiple radio-frequencies (RF) ranging from 8 kHz to 65 kHz. The receiver unit detects the transmitted RF signals as well as standard 60 Hz electrical power lines and broad-band RF signals when operated in passive detection modes. This utility tracing instrument is an analog device which provides visual and audible feedback to the operator when a utility coupled with the transmitted signal is crossed. The transmitter produces a radio-frequency signal in the utility to be traced by either induction coupling or direct hook-up. The receiver output varies an audible pitch and visual feedback depending upon how far the utility is from the receiver. By carefully adjusting the gain of the receiver it is possible to determine the location of the utility and to separate it from adjacent utilities.

The investigation areas were scanned using passive 60 Hz and the broad-band RF detection modes to identify potential utilities that may be present. Inductive and direct hook-up methods were used to trace specific utilities when possible. Identified utilities were marked on the ground surface with spray paint and/or pin flags.

*Pipe Video Imaging*

A pipe video inspection system was used to attempt to image the floor drain system located on the south side of the 372 Riverdale building interior. A Pearpoint Flexiprobe P340 system was used to image the floor drain system. A high-resolution camera is mounted on a fiberglass 300-foot long push-rod that is capable of negotiating most clean-outs and traps encountered. This system has the capability of recording the video on a SD card for easy transfer to a computer and review of the pipe images.

## ***Results and Discussion***

*Site-wide Investigation to Identify USTs and Potential Areas of Concern*

The property located at 372 Riverdale Avenue was being actively used by a busy automobile repair business at the time of the geophysical investigation. Cars were parked very tightly throughout large portions of the property making it impossible to access those areas. Terrain conductivity EM data were collected across an accessible portions on the western side of the property located to the north and south of the building. Figure 1 shows the color contoured EM results from those areas as well as areas where cars were parked and portions of the site covered that were with reinforced concrete.

The terrain conductivity results on the north side of the 372 Riverdale building indicate that no anomalous features are present within that area. The EM results on the south side of the building showed a strong EM response in the area where the sanitary sewer and water services extend between Culver Street and the south side of the 372 Riverdale building (Figure 1).

The areas where terrain conductivity EM data were collected were also investigated using GPR methods. The GPR results suggested that fill or building rubble may be present throughout most of these areas.

The remaining accessible portions of the 372 Riverdale property were scanned using a combination of the GPR method and hand-held EM metal detection method. Features identified during this portion of the investigation included:

- A backfilled excavation from a former 500-gallon UST located near the southeast corner of the building. A vent pipe visible at the southeast corner of the building extends to the edge of the excavation (Figure1).
- A potential former heating oil UST that may have been abandoned in place located on the east side of the building, near the northeast building corner (Figure 1). This feature produced an EM response with the hand-held EM metal detection instrument and also an ambiguous GPR response. A vent pipe located on the building wall and a potential supply/return line were also identified leading from the building to the possible abandoned UST location. The geophysical results at this locations were not conclusive. Therefore, it is recommended that additional direct investigation of this location, such as excavation, be considered to better determine if a UST is present at this location.

In additional to the UST related features described above, utilities that were identified during the investigation were marked on site and are shown on Figure 1.

Several Taco Trucks and other vehicles were present at the 13 Culver Street property at the time of the geophysical investigation that kept it from being possible to complete an EM investigation using the terrain conductivity EM instrument. Instead the accessible portions of the property were scanned using the hand-held EM metal detection method and the GPR methods. A previous site investigation inspection noted a sealed pipe protruding from the east side of the residence at 13 Culver (Figure 1). Geophysical investigation surrounding that area did not indicate the presence of any USTs. However, tracing the natural gas service for the property did extend from Culver Street to the approximate location where the sealed pipe was situated, suggesting that it may have been related to the previous gas service for the property. No USTs or other anomalies of concern were noted within the accessible portions of the property at 13 Culver Street.

*Utility Clearance of Drilling Locations*

A number of environmental boring and geotechnical borings were cleared of identifiable utilites. Utilities surrounding the borings located inside the 372 Riverdale Avenue building and those situated on reinforced concrete were identified using a combination of RF utility locating methods and GPR methods. All other boring locations were also scanned using RF and GPR methods, and additionally the hand-held EM metal detection method. Identified utilities inside the building were marked on site using chalk, and those identified outside of the building were marked using spray paint. If a utility was too close to the proposed drilling location, the proposed drilling location was adjust to an area clear of identified utilities with the approval of the Ransom representative.

*Pipe Inspection of the Floor Drain System*

A attempt was made to access the floor drain system located inside of the south side of the auto shop at the 372 Riverdale property. The camera was inserted into the clean-out located inside of the southeast corner of the building. However, there was a wire trap approximately 5 feet beyond the clean-out opening that prevented access (see photo). Attempts were made to access the drain system through three other clean-outs located along the length of the floor drain inside the south side of the building, but they were all filled with sediments preventing access. Because of the site conditions, it was not possible to inspect the floor drain system that extends from east to west inside the south side of the auto shop area.



*Illustration 1: Photo showing wire trap inside floor drain clean-out.*

***Summary and Closing***

In summary, the geophysical investigation of the 372 Riverdale Avenue and 13 Culver Street properties was limited to the accessible areas. A large number of cars parked closely together was present at the 372 Riverdale propsert at the time of the investigation, and several trucks and cars were also present at the 13 Culver Street property limiting access in portions of the properties.

At the 372 Riverdale property one backfilled UST excavation was identified near the southeast corner of the site building, and a potential abandoned in place UST was identified on the east side of the building near the northeast corner of the building. Excavation or another appropriate methods will be required to better determine if there is actually an abandoned UST present at that location.

A natural gas service line leading from Culver Street to the east side of the residence at 13 Culver Street was identified that appears to end in the approximate location where a sealed pipe was noted protruding through the foundation wall during a previous site inspection. No USTs were identified in the area where that sealed pipe was noted.

Aside from those feature noted and described above, and shown on Figure 1, no other underground features were identified during this investigation.

All geophysical data and field notes collected as a part of this investigation will be archived at the AGS office. The data collection and interpretation methods used in this investigation are consistent with standard practices applied to similar geophysical investigations. The correlation of geophysical responses with probable subsurface features is based on the past results of similar surveys although it is possible that some variation could exist at this site. Due to the nature of geophysical data, no guarantees can be made or implied regarding the presence or absence of additional objects or targets beyond those identified.

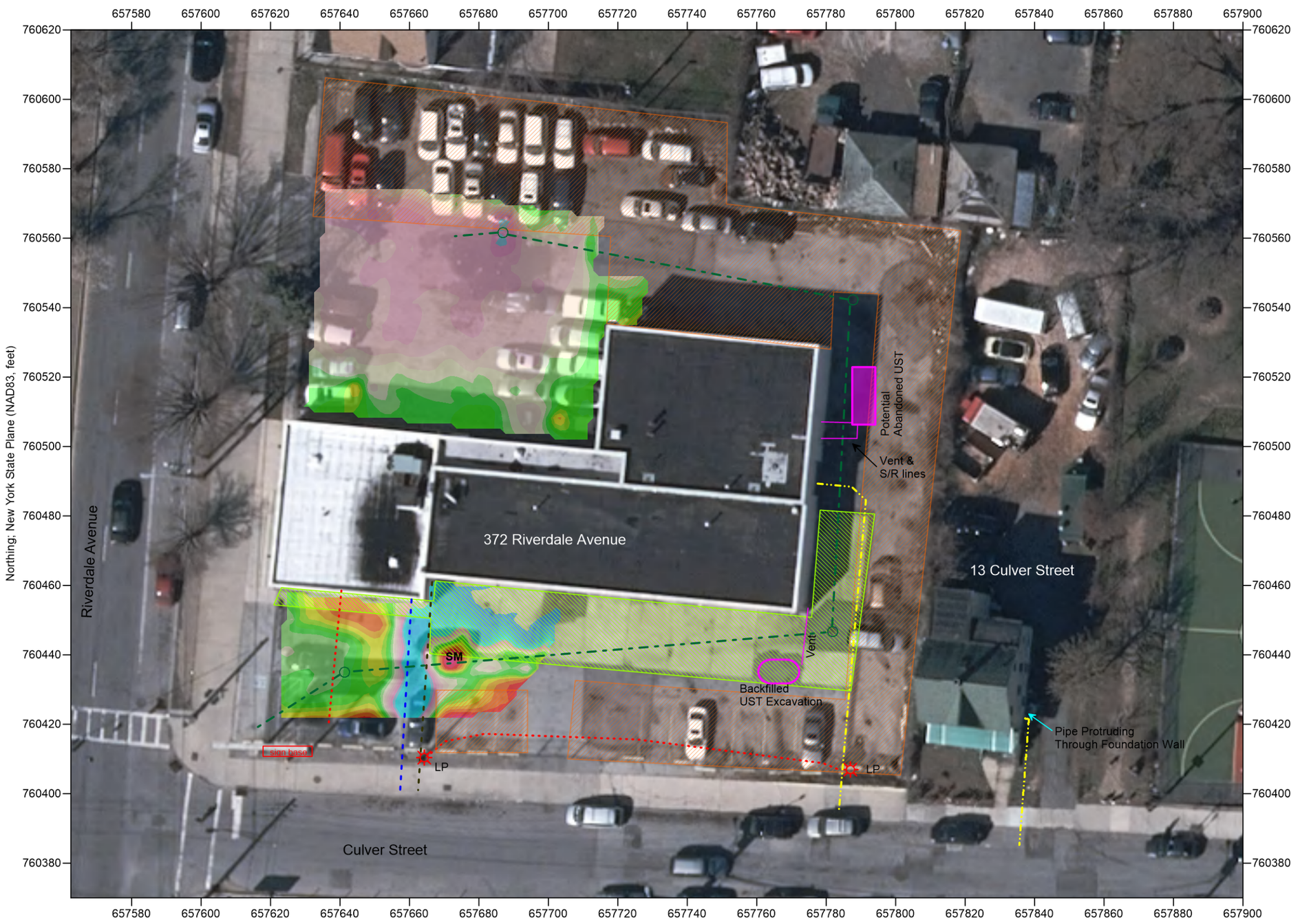
If you have any questions regarding the results of this field investigation, please contact me at 610-722-5500. It was a pleasure working with you on this project and we look forward to being able to provide you with sub-surface imaging services in the future.

Sincerely,



Donald Jagel, P.G.
*Principal Geophysicist/Branch Manager*
Advanced Geological Services, Inc.
P.O. Box 349, 280½ East Main Street
Chillicothe, OH 45601

attachment: Figure 1




Legend

- Parked Cars
- Reinforced Concrete
- Water
- Sanitary Sewer
- Electric
- Natural Gas
- Storm Sewer
- LP Light Post
- Catch Basin
- SM Surface Metal

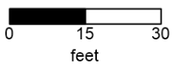
NOTES:

1) Terrain conductivity EM data were collected using a Geonics EM31 instrument. A GSSI SIR3000 GPR instrument was used to collect data close to buildings and parked vehicles. Utilities at the site were identified using a of a radio frequency utility locating, system (RD-4000) and a hand-held EM metal detection instrument (TW-6 m-scope). Accessible areas that could not be investigated using the terrain conductivity EM methods were also scanned using the TW-6 m-scope and GPR methods. All identified features were marked on site with spray paint.
2) Identified site features are based on the geophysical responses from several geophysical instruments. See report text for additional detail.
3) Base aerial orthophotograph downloaded from https://orthos.dhses.ny.gov/, and included file e_06570760_06_07400_4bd_2016.zip. All base orthophotographs have an acquisition date of 2016. This work was not completed by a licensed surveyor, as such should be considered approximate, and is for illustrative purposes only.
4) The items shown on this figure may not be all inclusive. AGS does not warrant the fact that additional buried features/utilities may be present which could not be identified by AGS personnel during this investigation.










ADVANCED GEOLOGICAL SERVICES

2016 Orthophotograph of the Site Showing Color Contoured Quadrature (Terrain Conductivity) EM Results, Identified Utilities, and Site Features

LOCATION: 372 Riverdale Avenue & 13 Culver Street
Yonkers, NY

CLIENT: Ransom Consulting, Inc.

PROJECT #: 17-175-1

ADVANCED GEOLOGICAL SERVICES, INC.

DATE: July 18, 2017

DRAWN BY: D. JAGEL

APPROVED BY: D. JAGEL

FIGURE 1

**APPENDIX B**

Soil Boring and Temporary Well Point Logs

Phase II Limited Subsurface Investigation
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-1

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Hand-augered | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Hand-augered | Total Depth: 4 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 3.0-3.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | - | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | SB-1 | | 0.00 | | |
| 4 | | | | 0.00 | | |
| 5 | | | | | **End of Boring - 4 feet bgs** | |
| 6 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-2

Page 1 of 1

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|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/29/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/29/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 5 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-2 | | 0.00 | Brown SILT, trace fine sand and gravel | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 24 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| 6 | | | | | **End of Boring - 5 feet bgs** | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-3

Page 1 of 1

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|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 5 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-3 | | 0.00 | Brown SILT, trace fine sand, some gravel | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 24 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| 6 | | | | | **End of Boring - 5 feet bgs** | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-6

Page 1 of 1

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|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/29/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/29/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs and 8.0 8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-6A | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 24 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Tan and brown fine SAND, some silt | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 36 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | SB-6B | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | Red and brown fine SAND, some silt | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
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| 16 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-7

Page 1 of 1

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|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 8.5-9.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | | | 0.00 | Brown dry SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 48 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 6 | | | | 0.00 | Brown SILT, some fine sand | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 36 | 0.00 | Brown and tan silty SAND | Moisture noted |
| 8 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 9 | | SB-7 | | 0.00 | | |
| | | | | 0.00 | Brown medium SAND | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
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| 16 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-8

Page 1 of 1

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|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs and 8.0-8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-8A | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 6 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Brown SILT, some fine sand | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 36 | 0.00 | Brown and tan fine SAND, trace silt | |
| 8 | | | | 0.00 | | |
| | | SB-8B | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-9

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs and 8.0-8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-9A | | 0.00 | Brown SILT, trace fine SAND, some gravel | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 6 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Tan and brown fine SAND and silt | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 36 | 0.00 | | Moisture noted |
| 8 | | | | 0.00 | | |
| | | SB-9B | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-10

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 8.5-9.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 12 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 6 | | | | 0.00 | Tan and brown fine SAND and silt | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 8 | | | 54 | 0.00 | | |
| | | | | 0.00 | | |
| 9 | | SB-10 | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-11

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs and 8.0-8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-11A | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 24 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | Brown silty fine SAND | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 42 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | SB-11B | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-12

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 8.0-8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 24 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Brown and tan fine SAND, some silt | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 42 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | SB-12 | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-13

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs and 8.0-8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-13A | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 36 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Brown and tan fine sand, some silt | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 36 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | SB-13B | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-14

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/29/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/29/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 3 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs and 1.5-2.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-14A | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | Fill material (red brick) | |
| 2 | | SB-14B | 24 | 0.00 | | |
| | | | | 0.00 | Brown SILT, trace fine sand | |
| 3 | | | | 0.00 | | |
| 4 | | | | | **End of Boring - 3 feet bgs** | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-15

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 5 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-15 | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 36 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| 6 | | | | | **End of Boring - 5 feet bgs** | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-16

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 5 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-16 | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 42 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| 6 | | | | | **End of Boring - 5 feet bgs** | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-17

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/28/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/28/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 8.0-8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Asphalt | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 15 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Brown and tan SILT, some fine sand | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 30 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | SB-17 | | 0.00 | Tan medium SAND | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-18

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/28/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/28/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 7.0-7.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Asphalt | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 30 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Tan and brown fine SAND, some silt | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | SB-18 | 42 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-19

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 5 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-19 | | 0.00 | Brown SILT, trace fine sand, some gravel | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 24 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| 6 | | | | | **End of Boring - 5 feet bgs** | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-20

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/28/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/28/2017 |
| Project No.: 111.02013 | Location: 13 Culver Street, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 8 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.0-0.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| 1 | | SB-20 | 18 | 0.00 | Top soil and organic material | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | Brown SILT, trace fine sand and gravel | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 6 | | | 36 | 0.00 | Tan fine SAND, some silt | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 8 | | | | 0.00 | | Drilling Refusal at 8.0 feet bgs |
| 9 | | | | | **End of Boring - 8 feet bgs** | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-21

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/28/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/28/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 2.5-3.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | | | 0.00 | Brown SILT, some gravel | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | SB-21 | 24 | 0.00 | Fill material (red brick) | Historic fill sample collected |
| | | | | 0.00 | Brown SILT, some fine sand | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 8 | | | 24 | 0.00 | | |
| | | | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-22

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 15 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 1.0-1.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | SB-22 | | 0.00 | Fill material (red brick) | Sample collected for historic fill |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | Brown SILT, trace fine sand | |
| 3 | | | 6 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Brown silty fine SAND | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 24 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | Grey medium SAND, some silt | |
| 10 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 11 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 12 | | | | 0.00 | | |
| | | | 36 | 0.00 | | |
| 13 | | | | 0.00 | | |
| | | | | 0.00 | Orange coarse SAND | |
| 14 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 15 | | | | 0.00 | | |
| 16 | | | | | **End of Boring - 15 feet bgs** | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-23

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/28/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/28/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 15 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 3.5-4.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Asphalt | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 36 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 6.80 | | |
| 4 | | SB-23 | | - | | Odors noted |
| | | | | 5.30 | | Odors noted |
| 5 | | | | - | | |
| | | | | 0.00 | Brown fine SAND, some silt | |
| 6 | | | | - | | |
| | | | | 3.20 | | |
| 7 | | | | - | | |
| | | | 42 | 0.00 | Tan and brown fine SAND | Moisture noted |
| 8 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | Brown medium SAND | |
| 10 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 11 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 12 | | | | 0.00 | | |
| | | | 36 | 0.00 | Brown coarse SAND | |
| 13 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 14 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 15 | | | | 0.00 | | |
| 16 | | | | | **End of Boring - 15 feet bgs** | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-24

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/29/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/29/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Asphalt | |
| 1 | | SB-24 | | 0.00 | Black and brown SILT and fine sand, trace fill material (red brick) | Historic fill sample collected. |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 30 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | Brown SILT, some fine sand | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | Brown medium SAND, some brown silt | |
| 7 | | | | 0.00 | | |
| | | | 42 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | | | 0.00 | Brown SILT, trace fine sand | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | Composite sample SB-24C collected. |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-25

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/29/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/29/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 5 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-25 | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 36 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| 6 | | | | | **End of Boring - 5 feet bgs** | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |

RANSOM Consulting, Inc.

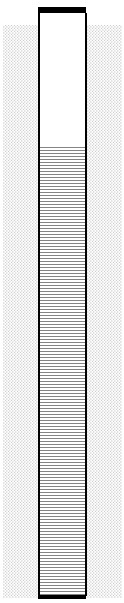
# TEMPORARY WELL LOG

| | | | |
|---|---|---|---|
| Project: CVS - Yonkers (Riverdale) | Well Permit Number: N/A | Well No./Boring: | TWP-1/SB-23 |
| Project No.: 111.02013 | Drilling Co.: EPI Inc. | Lock No.: N/A | |
| Site Location: 372 Riverdale Avenue, Yonkers NY | Driller: Carl Farley | Start Date: 6/28/2017 | |
| Geologist: Lauren Rojewski | Drilling Method: Direct Push | Date Complete: 6/28/2017 | |
| Ground Elev.: N/A | Drilling Equip: GeoProbe 7720 DT | Total Boring Depth: 20 feet bgs | |
| Top of Casing Elev.: N/A | Static Water (feet bgs): 8.0 | Product Thickness: NA | |

Remarks: Well installed within soil boring SB-23 location.

| GEOLOGIC LOG | Depth (ft.) | Blow/6 inches | Recovery (ft.) | PID (ppm) | Sample |
|---|---|---|---|---|---|
| Asphalt, brown SILT, trace fine sand | 0.0-1.0 | | | 0.0 | |
| | 1.0-2.0 | | | 0.0 | |
| | 2.0-3.0 | | 36 | 0.0 | |
| | 3.0-4.0 | | | 6.8 | SB-23 |
| | 4.0-5.0 | | | 5.3 | |
| Brown fine SAND, some silt | 5.0-6.0 | | | 0.0 | |
| | 6.0-7.0 | | | 3.2 | |
| Tan and brown fine SAND | 7.0-8.0 | | 42 | 0.0 | |
| | 8.0-9.0 | | | 0.0 | |
| Brown medium SAND | 9.0-10.0 | | | 0.0 | |
| | 10.0-11.0 | | | 0.0 | |
| | 11.0-12.0 | | | 0.0 | |
| Brown coarse SAND | 12.0-13.0 | | 36 | 0.0 | |
| | 13.0-14.0 | | | 0.0 | |
| | 14.0-15.0 | | | 0.0 | |
| | 15.0-16.0 | | | 0.0 | |
| | 16.0-17.0 | | | 0.0 | |
| | 17.0-18.0 | | - | 0.0 | |
| | 18.0-19.0 | | | 0.0 | |
| | 19.0-20.0 | | | 0.0 | |
| **End of Boring - 20 feet bgs** | 20.0-21.0 | | | | |
| | 21.0-22.0 | | | | |
| | 22.0-23.0 | | | | |
| | 23.0-24.0 | | | | |
| | 24.0-25.0 | | | | |
| | 25.0-26.0 | | | | |
| | 26.0-27.0 | | | | |
| | 27.0-28.0 | | | | |
| | 28.0-29.0 | | | | |
| | 29.0-30.0 | | | | |
| | 30.0-31.0 | | | | |
| | 31.0-32.0 | | | | |
| | 32.0-33.0 | | | | |
| | 33.0-34.0 | | | | |
| | 34.0-35.0 | | | | |
| | 35.0-36.0 | | | | |
| | 36.0-37.0 | | | | |
| | 37.0-38.0 | | | | |
| | 38.0-39.0 | | | | |
| | 39.0-40.0 | | | | |

**AS-BUILT WELL SCHEMATIC**



Well Material: Schedule 40 PVC
Well casing stickup: 3 inches
Well casing diameter: 1 inch
Well casing length: 5 feet
Grout length: N/A

Gravel pack length: N/A
Gravel pack size: N/A

Well Screen Material: Sch. 40 PVC
Well Screen diameter: 1 inch
Well screen length: 15 feet
Well slot size: 0.010 slot
Total Well Depth: 19.75 feet
Bore hole diameter: 4 inches
Bore hole depth: 20 feet

# TEMPORARY WELL LOG

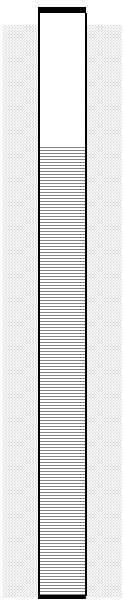
RANSOM Consulting, Inc.

| | | | |
|---|---|---|---|
| Project: CVS - Yonkers (Riverdale) | Well Permit Number: N/A | Well No./Boring: | TWP-2/SB-22 |
| Project No.: 111.02013 | Drilling Co.: EPI Inc. | Lock No.: N/A | |
| Site Location: 372 Riverdale Avenue, Yonkers NY | Driller: Carl Farley | Start Date: 6/27/2017 | |
| Geologist: Lauren Rojewski | Drilling Method: Direct Push | Date Complete: 6/27/2017 | |
| Ground Elev.: N/A | Drilling Equip: GeoProbe 7720 DT | Total Boring Depth: 20 feet bgs | |
| Top of Casing Elev.: N/A | Static Water (feet bgs): 8.0 | Product Thickness: NA | |

Remarks: Well installed within soil boring SB-22 location.

| GEOLOGIC LOG | Depth (ft.) | Blow/6 inches | Recovery (ft.) | PID (ppm) | Sample |
|---|---|---|---|---|---|
| Concrete, brown SILT, trace fine sand | 0.0-1.0 | | | 0.0 | |
| Fill material, red brick | 1.0-2.0 | | | 0.0 | SB-22 |
| Brown SILT, trace fine sand | 2.0-3.0 | | 6 | 0.0 | |
| | 3.0-4.0 | | | 0.0 | |
| | 4.0-5.0 | | | 0.0 | |
| Brown silty fine SAND | 5.0-6.0 | | | 0.0 | |
| | 6.0-7.0 | | | 0.0 | |
| | 7.0-8.0 | | 24 | 0.0 | |
| | 8.0-9.0 | | | 0.0 | |
| Grey medium SAND, some silt | 9.0-10.0 | | | 0.0 | |
| | 10.0-11.0 | | | 0.0 | |
| | 11.0-12.0 | | | 0.0 | |
| | 12.0-13.0 | | 36 | 0.0 | |
| Orange coarse SAND | 13.0-14.0 | | | 0.0 | |
| | 14.0-15.0 | | | 0.0 | |
| | 15.0-16.0 | | | 0.0 | |
| | 16.0-17.0 | | | 0.0 | |
| | 17.0-18.0 | | - | 0.0 | |
| | 18.0-19.0 | | | 0.0 | |
| | 19.0-20.0 | | | 0.0 | |
| **End of Boring - 20 feet bgs** | 20.0-21.0 | | | | |
| | 21.0-22.0 | | | | |
| | 22.0-23.0 | | | | |
| | 23.0-24.0 | | | | |
| | 24.0-25.0 | | | | |
| | 25.0-26.0 | | | | |
| | 26.0-27.0 | | | | |
| | 27.0-28.0 | | | | |
| | 28.0-29.0 | | | | |
| | 29.0-30.0 | | | | |
| | 30.0-31.0 | | | | |
| | 31.0-32.0 | | | | |
| | 32.0-33.0 | | | | |
| | 33.0-34.0 | | | | |
| | 34.0-35.0 | | | | |
| | 35.0-36.0 | | | | |
| | 36.0-37.0 | | | | |
| | 37.0-38.0 | | | | |
| | 38.0-39.0 | | | | |
| | 39.0-40.0 | | | | |

**AS-BUILT WELL SCHEMATIC**



Well Material: Schedule 40 PVC
Well casing stickup: 17 inches
Well casing diameter: 1 inch
Well casing length: 5 feet
Grout length: N/A

Gravel pack length: N/A
Gravel pack size: N/A

Well Screen Material: Sch. 40 PVC
Well Screen diameter: 1-inch
Well screen length: 15 feet
Well slot size: 0.010 slot
Total Well Depth: 18.50 feet
Bore hole diameter: 4 inches
Bore hole depth: 20 feet

**APPENDIX C**

Laboratory Analytical Reports

Phase II Limited Subsurface Investigation
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

# PHASE I ENVIRONMENTAL SITE ASSESSMENT

**for**

## 13 Culver Street and 372 Riverdale Avenue
## Yonkers, NY 10705

***Prepared for:***

**Claudius Development LLC**
**117 Washington Avenue**
**Pleasantville, NY 10570**

***Prepared by:***

**Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C.**
**368 Ninth Avenue, 8th Floor**
**New York, NY 10001-2727**



**Jennifer Armstrong**
**Senior Project Manager**



**Robert Kovacs, PG, LSRP**
**Senior Associate**

**Report Date:** **April 24, 2026**
**180-Day Viability Date:** **October 21, 2026**
**190141301**

LANGAN

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Appendix G Resumes of Environmental Professionals

# EXECUTIVE SUMMARY

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C. (Langan) completed a Phase I Environmental Site Assessment (ESA) of the properties at 372 Riverdale Avenue and 13 Culver Street in Yonkers, New York (the "subject property") under the written authorization of Claudius Development LLC (the "Client" and the "user").

The Phase I ESA was completed following the guidelines of ASTM International Standard Practice E1527-21 (ASTM E1527-21), the United States Environmental Protection Agency's (US EPA) All Appropriate Inquiries (AAI) Rule, and industry standard practice. The user requested this ESA as part of their environmental due diligence related to a potential transaction involving the subject property.

## ***Subject Property Layout***

The subject property has a combined area of about 1.02 acres and includes 372 Riverdale Avenue (Yonkers Tax ID 1.-129-30) and 13 Culver Street (Yonkers Tax ID 1.-129-26) within an urban block setting. 372 Riverdale Avenue/Lot 30 is improved with a 1-story vacant auto repair building with asphalt paved parking areas. 13 Culver Street/Lot 26 is vacant following demolition of a residential building in or about December 2021. Access is to 372 Riverdale Avenue/Lot 30 is provided from Riverdale Avenue and Culver Street and access to 13 Culver Street/Lot 26 is provided via a gate on Culver Street. The subject property sits at an elevation of about 50 feet above mean sea level and is generally flat with a gentle slope downward toward the west, in a region that slopes toward the Hudson River, located approximately 2,500 feet west.

## ***Subject Property Current Use***

The subject property is vacant. The most recent auto repair tenant vacated 372 Riverdale Avenue/Lot 30 in April 2026. At the time of the site reconnaissance, the local Fire Marshall was executing an eviction and locking up the building/lot. Evidence of poor housekeeping by the most recent tenant compared to conditions in the 2017 Phase I ESA was observed, including standing fluids, debris, trash, auto parts, and toppled containers of motor oil products at various locations throughout the building and lot.

## ***Subject Property History***

The subject property was developed with several residential dwellings with detached garages or stables as early as 1897. By 1917, several store fronts were located along Riverdale Avenue, and a Cast Stone Products building was located at the east half of 13 Culver Street/Lot 26. The stone products business was no longer preset in 1951. Most of the residential structures at 372 Riverdale Avenue/Lot 30 were demolished between 1966 and 1974 and the current auto repair building was constructed by 1974 with only two remaining residences in the northwest part of the Lot. The two remaining residences on Lot 30 were demolished by 1984 and that portion of

the lot was paved with asphalt for additional parking. The auto repair facility was used by Goodyear from 1974 to 2015, West Coast Auto beginning in 2016, followed by Turbo Auto Sales First Corp., who vacated in April 2026. Auto garages on the east half of 13 Culver Street/Lot 26 were demolished by the 1970s and the remaining residence in the western part of the lot was demolished between in or about December 2021.

### ***Adjoining Properties and Surrounding Area***

The surrounding area was mostly developed with mixed uses as early as the late 1800s and is currently occupied by mainly residential, commercial, institutional, parks properties. The subject property is adjoined to the north by residential properties, some with detached garages, to the east by Culver Park, to the south by Culver Street, followed by a gasoline filling station and residences, and to the west by Riverdale Avenue, followed by a New York State owned arterial and Nathanial Hawthorne School.

### ***Conclusions***

Langan completed a Phase I ESA of the subject property using the scope guidelines and inherent limitations of ASTM E1527-21. Table ES-1 presents the conclusions of the Phase I ESA.

**Table ES-1 Conclusions, Findings and Opinions**

| **ASTM E1527-21 Scope Items** |
|---|
| **Recognized Environmental Conditions (RECs)** |
| *Former Auto Repair Operations, Open Spill, and Evidence of Poor Housekeeping at 372 Riverdale Avenue/Lot 30:* The building has been used for auto repair by multiple tenants since 1974. The most recent tenant vacated in April 2026 and evidence of poor housekeeping (staining, standing fluids, trash, and debris) was observed at various locations throughout 372 Riverdale Avenue/Lot 30. New York State Department of Environmental Conservation (NYSDEC) Spill No. 2506149 was reported on October 7, 2025 when motor oil was reportedly flowing from the site into to street drains. Case notes also indicated that auto repair work was conducted on the streets with oil leaks noted. The spill case remains open. Documented and undocumented releases of petroleum products or hazardous substances related to auto repair may have impacted soil, groundwater, and soil vapor. |
| *Hazardous Waste Generation - Auto Service Center at 372 Riverdale Avenue/Lot 30:* Lot 30 was identified as a Small Quantity Generator (SQG) in 1986 and a conditionally exempt small quantity generator (CESQG) in 1993, 2006, and 2007 of hazardous waste containing ignitable waste and spent nonhalogenated solvents including xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol. Manifests indicate hazardous waste shipments continued through 2012. No violations or non-compliance issues were reported and the listing was not reclassified as a non-generator. Undocumented releases |

| **ASTM E1527-21 Scope Items** |
|---|
| of hazardous substances or hazardous waste may have impacted soil groundwater, and/or soil vapor at the subject property. |
| *Documented Contamination at Subject Property:* An August 15, 2017 Phase II Limited Subsurface Investigation identified groundwater impacted with petroleum related volatile organic compounds (VOCs) at concentrations above NYSDEC Technical Operational and Guidance Series Ambient Water Quality Standards and Guidance Values (SGVs) and fill with metal and semivolatile organic compounds (SVOCs) at concentrations above NYSEC Restricted Use Restricted Residential Soil Cleanup Objectives. |
| *Current and Historical Use of Adjoining and Nearby Upgradient Properties and Related Open Spills:* Adjoining and/or nearby upgradient properties have been occupied by gasoline filling stations (1951- present) and a plastics manufacturer identified as a potential handler of per- and polyfluoroalkyl substances (PFAS). Two open petroleum spills are associated with the gasoline filling station at the south adjoining property at 380 Riverdale Avenue with "significant" impacts to groundwater, according to the NYSDEC case notes. Documented and undocumented releases at these sites may have impacted regional environmental conditions in the vicinity of the subject property. |
| **Controlled Recognized Environmental Conditions (CRECs)** |
| Langan did not identify CRECs. |
| **Historical Recognized Environmental Conditions (HRECs)** |
| *On-Site Closed Spill:* Spill No. 1710340 was reported on February 15, 2018 at Turbo Auto Sales when petroleum-impacted soil was encountered during removal of a 3,500-gallon No 2 heating Oil UST east of the garage building at 372 Riverdale Avenue. About 220 tons of impacted soil was over-excavated and disposed offsite. Post-excavation soil samples confirmed concentrations were below NYSDEC CP-51 soil cleanup levels for fuel oil impacted soil and the spill was closed on April 16, 2018. |
| **Significant Data Gaps** |
| Significant data gaps were not encountered. |

# 1. INTRODUCTION

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology D.P.C. (Langan) completed a Phase I Environmental Site Assessment (ESA) of the properties at 372 Riverdale Avenue and 13 Culver Street in Yonkers, New York (the "subject property") under the written authorization of Claudius Development LLC (the "Client" and the "User"). A Subject Property Location Map is provided in Appendix A (Figure 1).

The Phase I ESA was completed following the guidelines of ASTM International Standard Practice E1527-21 (ASTM E1527-21), the United States Environmental Protection Agency's (US EPA) All Appropriate Inquiries (AAI) Rule, and industry standard practice. The user requested this ESA as part of their environmental due diligence related to a potential transaction involving the subject property.

## 1.1 Purpose

The purpose of this Phase I ESA is to identify recognized environmental conditions (REC) associated with the subject property. This purpose also includes identifying controlled recognized environmental conditions (CREC), historical recognized environmental conditions (HREC), de minimis conditions, and significant data gaps. The definitions of REC, CREC, HREC, de minimis condition and other select ASTM terms used in this report are in Section 8.

## 1.2 Scope of Services

Langan's scope of services consisted of the completion of a Phase I ESA following the guidelines of ASTM E1527-21. Langan's scope of services as it pertains to the elements of a Phase I ESA as specified in ASTM E1527-21 is described below.

CERCLA hazardous substances and petroleum products have been detected in background environmental samples across the globe, including in areas removed from specific recognized sources. This Phase I ESA was not intended to evaluate background concentrations of CERCLA hazardous substances or petroleum products, regardless of whether the source is naturally occurring or anthropogenic. The objective of Langan's scope of services was to identify the presence, likely presence, and/or material threat of a release of CERCLA hazardous substances and petroleum products related to specific property uses that are generally recognized as known or potential sources of such substances and products.

### *1.2.1 Records Review and Local Government Interviews*

Langan contracted a third-party provider to search environmental regulatory databases and provide historical records. The database search included select federal, state, local and tribal standard source environmental databases within the approximate search radii specified by ASTM E1527-21.

Langan submitted Freedom of Information Act (FOIA) requests to supplement environmental database listing information. The FOIA requests were submitted to: New York State Department

of Environmental Conservation (NYSDEC), New York State Department of Health (NYSDOH), Westchester County Department of Health, and City of Yonkers. Agency FOIA-requested information, where received, is discussed in relevant sections of this report, referenced in Section 7. Pertinent documents are provided in Appendix B.

Langan supplemented the third-party-provided historical records with review of online historical record sources including Google Earth Pro and NETR Online.

#### *1.2.2 Site Reconnaissance and Owner/Operator/Occupant Interviews*

Langan completed the site reconnaissance on April 16, 2026. John Saraceno, Vice President of the User, accompanied Jennifer Armstrong of Langan during the site reconnaissance.

Langan walked the periphery of the subject property, observed the subject property from adjoining public thoroughfares, and walked the accessible interiors of structures at the subject property. Langan observed the adjoining properties and the surrounding area from the periphery of the subject property and from public thoroughfares adjoining to or traveled on to access the subject property. The weather at the time of the site reconnaissance was approximately 80 Degrees Fahrenheit and sunny. Photographs from the site reconnaissance are provided in Appendix C.

Site-specific questions were sent for owner response via email on April 22, 2026. Their responses are incorporated into the relevant sections of this report. The subject property is vacant so occupants were not interviewed.

#### *1.2.3 Evaluation, Report and Parts Used in Concert*

Langan evaluated the pieces of information obtained from the records reviews, site reconnaissance and interviews described above, and from the user as described in Section 1.3 in concert with each other. Langan's findings, opinions, and conclusions are discussed throughout this report. Significant assumptions, deletions, deviations or exceptions to ASTM E1527-21 are noted in Section 1.4.

#### *1.2.4 Non-ASTM Scope Services*

The scope of services for the Phase I ESA did not include non-scope ASTM considerations.

### 1.3 User Responsibilities

Langan requested that the User provide the results of tasks the User is responsible for completing to satisfy the requirements of AAI. The tasks include: searching for known environmental liens and activity and use limitations (AULs) filed or recorded against the subject property, and provision of information related to specialized knowledge or experience of the user or the degree of obviousness relative to conditions indicative of releases or threatened releases; actual knowledge of the User regarding environmental liens or AULs related to the subject property; specialized knowledge or experience of the user; reasons for significantly lower purchase prices, and commonly known or reasonably ascertainable information within the local community about the subject property. Langan also requested that the User state the reason the

Phase I ESA was requested. A summary of the user's responses is provided in Appendix D and relevant information provided by the User is discussed in applicable sections of this report.

Unless specifically included in the scope of services, Langan did not complete a title search or a search for environmental liens or AULs, as that is the responsibility of the User. If the User requested that Langan complete such searches on the user's behalf, the information was supplied to Langan by a vendor, and to the vendor by government sources; therefore, neither Langan nor the vendor can verify the completeness or accuracy of the title search, or AUL searches.

### 1.4 Limiting Conditions/Deviations

Debris, car parts, and trash were observed at various locations limiting ground and floor visibility at the subject property. Electricity was not on in the building at 372 Riverdale Avenue and lack of lighting reduced visibility. This limiting condition is not expected to impact the overall conclusions of this Phase I ESA and is not considered a significant data gap.

Langan did not delete or deviate from the ASTM E1527-21 guidelines during this Phase I ESA.

### 1.5 Data Gaps

Data gaps, if encountered, are discussed throughout the report. Significant data gaps, if any, are summarized in Section 5.0.

# 2. SUBJECT PROPERTY DESCRIPTION AND CURRENT USE

The following sections describe the subject property location, ownership, physical setting, and current layout and operations.

## 2.1 Location, Legal Description, and Ownership

The subject property has a combined area of about 1.02 acres and includes 372 Riverdale Avenue (Yonkers Tax ID 1.-129-30) and 13 Culver Street (Yonkers Tax ID 1.-129-26) at the northeast corner of Riverdale Avenue and Culver Street within an urban block setting in Yonkers, New York.

372 Riverdale Avenue (Yonkers Tax ID 1.-129-30) has an area of 0.85 acres and is owned by Dutchman Realty LLC. 13 Culver Street (Yonkers Tax ID 1.-129-26) has an area of 0.17 acres and is owned by Dutchman Realty II LLC. City of Yonkers property cards are included in Appendix B.

## 2.2 Physical Setting

The physical setting that includes the geologic, hydrogeologic, hydrologic, and topographic characteristics of the subject property and surrounding area are discussed below.

### *2.2.1 Topography*

The 2023 United States Geological Survey (USGS) 7.5-minute quadrangle topographic map for Yonkers depicts the subject property at an elevation of about 50 feet above mean sea level (amsl) and as generally flat with a gentle slope downward toward the west. The regional topography slopes downward toward the west and the Hudson River, which is located approximately 2,500 feet west of the subject property.

### *2.2.2 Geology*

According to the August 15, 2017 Phase II Limited Subsurface Investigation, the subject property is underlain by mostly brown and tan silt with trace fine sand to about 8 feet below grade surface (bgs) and brown and tan fine to medium sands between approximately 8 feet bgs and 20 feet bgs; however, fill containing brick, concrete, and gravel was observed at several borings. Bedrock at the subject property is expected to consist of Metamorphic Rocks of Sedimentary and Volcanic Origin of the Fordham Gneiss, based on 1970 The Geologic Map of New York – Lower Hudson Sheet, by Donald W. Fisher, Yngnar W. Isachsen, and Lawrence V. Rickard.

### *2.2.3 Hydrogeology*

Surface water bodies are not present within the boundary of the subject property. The nearest surface water body is the Hudson River located approximately 2,500 feet west of the subject property. Groundwater flow can be influenced by several factors such as surface water bodies, wetlands, hydrogeologic and anthropogenic variables. Based on the August 15, 2017 Phase II Limited Subsurface Investigation, groundwater in the southwest part of the subject property was encountered at about 8 feet bgs. Groundwater is expected to flow west, based on topographic gradient and proximity to the Hudson River.

### 2.3 Subject Property Description

372 Riverdale Avenue/Lot 30 consists of vacant auto repair building with asphalt paved parking areas. The building consists of office space, main garage, restrooms, parts/tire wash, out-of-service boiler room, storage room. The most recent tenant vacated in April 2026. At the time of the site reconnaissance, the local Fire Marshall was executing an eviction and locking up the building/lot. Evidence of poor housekeeping by the most recent tenant, compared to conditions in the 2017 Phase I ESA was observed, including standing fluids, debris, trash, auto parts, and toppled containers of motor oil products at various locations throughout the building and lot.

13 Culver Street (Lot 26) is a vacant, vegetated lot. The residential building present for the 2017 Phase I ESA was demolished in or about December 2021. A pile of debris (wood, pipes, and plastic bags with unknown contents) was observed in the southern part of the lot.

A Subject Property Layout Map is provided in Figure 2 of Appendix A. Photographs of the subject property and a checklist documenting Langan's observations relative to the features, activities, uses and conditions outlined in Section 9.4 of ASTM E1527-21 are in Appendix C.

### 2.4 Current Subject Property Use

The subject property is unoccupied.

The following table summarizes subject property utility providers.

**Table 2-1**

| Utility | Providers |
|---|---|
| Electricity | Con Edison |
| Natural gas | Con Edison |
| Water | City of Yonkers |
| Sewer | City of Yonkers |

### 2.5 Hazardous Substances and Petroleum Products

The subject property is unoccupied, but based on observations, the prior tenant of 372 Riverdale Avenue/Lot 30 used various petroleum products for auto repair.

#### *2.5.1 Underground Storage Tanks (USTs)*

Langan did not observe or identify evidence of current USTs at the subject property. Information on historic or abandoned USTs is included in Sections 3.2 and 3.3.

#### *2.5.2 Aboveground Storage Tanks (ASTs)*

Langan observed a 275-gallon waste oil tank in the center of the main garage. Although standing fluids were observed on the floor, it did not appear related to the AST, which appeared in good condition.

#### *2.5.3 Drums, Totes, and Intermediate Bulk Containers*

Langan did not observe drums, totes, or intermediate bulk containers at the subject property, except for 55-gallon plastic drums used for general trash.

#### *2.5.4 Other Chemical Storage, Containers, or Equipment*

About 100 containers of motor oil, other automobile products, and paints (varying size of 1 quart to 5-gallon) were observed in throughout the building (mainly main garage and storage room north of the main garage) and parking lots at 372 Riverdale Avenue/Lot 30. Several containers were toppled next to puddles/stains on pavement or budling slabs. The building slab appeared to be in generally good condition (free of cracks/spalls), but cracks and depressions were noted in asphalt pavement. Petroleum-like odors were observed the storage area north of the main garage and east of the out-of-service boiler room.

### 2.6 Air Emissions

Air emission sources were not observed.

### 2.7 Waste Management

The following sections describe current hazardous and non-hazardous waste streams, and observations of fill areas or other solid waste throughout the subject property.

#### *2.7.1 Hazardous Waste*

Langan did not observe hazardous waste generation at the subject property.

#### *2.7.2 Non-Hazardous Waste*

The subject property is not occupied, but general non-hazardous waste (debris, trash, car parts), a dumpster, and drums used as trash receptacles were observed throughout 372 Riverdale Avenue/Lot 30.

#### *2.7.3 Fill Areas or Solid Waste*

Langan did not observe areas that were apparently filled or graded by non-natural causes (or filled with material of unknown origin) that suggest the presence of garbage, construction debris, demolition debris, or other solid waste disposal, or mounds or depressions suggesting solid waste disposal.

### 2.8 Wastewater

Sanitary wastewater is discharged to the municipal sanitary sewer system.

### 2.9 Storm Water

Storm water at the subject property percolates vegetated areas, sheet flows onto adjacent roadways, or is collected in catch basins that discharge to the municipal storm sewer system.

# 3. SUBJECT PROPERTY HISTORY AND RECORDS REVIEW

The following sections provide summaries of the historical uses of the subject property, and available information regarding documented environmental conditions associated with the historical uses.

## 3.1 Historical Summary

Langan compiled the following summary of the subject property history based on a review of readily available and reasonably ascertainable sources and interviews. Historical resources are provided in Appendix E.

The following summary of the subject property history was compiled based on a review of readily available and reasonably ascertainable sources and interviews. Historical resources are provided in the Appendix.

Table 3-1 Subject Property History

| Time Period | Historical Discussion |
|---|---|
| Late 1800s – Mid 1900s | Topographic maps and Sanborn maps indicate the subject property was developed with several residential dwellings with detached garages or stables as early as 1897. By 1917, several store fronts were located along Riverdale Avenue, and a Cast Stone Products building was located at the east half of 13 Culver Street/Lot 26 (Sanborn maps). The Cast Stone products business was no longer present by the 1951 Sanborn map, but that portion of the lot was noted as multiple auto garages. |
| 1970s | According to aerial photos and Sanborn maps, most of the residential structures at 372 Riverdale Avenue/Lot 30 were demolished between 1966 and 1974, and the current auto repair building was constructed by 1974 (Sanborns and City of Yonkers Property Info). According to city directories, the building was occupied by Goodyear Tire/Auto Service. Two 3-strory residential buildings remained in the Norwest part of the lot.<br><br>One residential building remained in the western part of 13 Culver Street/Lot 26, but the auto garages were no longer present (aerial photos and Sanborn maps). |
| 1980s – 2000s | The two residential buildings in the northwest part of 372 Riverdale Avenue/Lot 30 were demolished by 1984, and the area was paved and used for parking (aerial photo). Goodyear continued to occupy the lot and building (city directories).<br><br>One residential budling remained in the west part of 13 Culver Street/Lot 26 (aerial photos/Sanborn). |
| 2010s – Present | 372 Riverdale Avenue was occupied by Goodyear until 2015 and then by West Coast Auto beginning in 2016 (June 7, 2017 Phase I ESA), followed by Turbo |

| | |
|---|---|
| | Auto Sales First Corp, who vacated in April 2026 (according to the property owner). According to sales info on Yonkers.gov, the lot was sold from Mary Louise Romano to Dutchman Realty LLC in April 2026.<br><br>The residence at 13 Culver Street/Lot 26 was demolished in or about December 2021 (according to the property owner). According to sales info on Yonkers.gov, the lot was sold from 15 Culver St Realty Corp to Dutchman Realty LLC in 2017 and then to Dutchmen Realty II LLC in 2024. |

Operation of an auto repair facility at the subject property from the mid 1970s to 2020s is a REC as documented and undocumented releases of petroleum products or hazardous substances may have impacted soil. groundwater, and soil vapor; additional information on releases at the subject property are in Section 3.2 and 3.3.

### 3.2 Regulatory Database Review

The subject property was listed in the following databases:

- UST in relation to Petroleum Bulk Storage Registration ID 3-802158 at 372 Riverdale Avue for a 3,500-gallon No. 2 fuel oil UST (Tank No. 1). The database included contradictory/incorrect info about Tank No 1 (e.g. installation in 1950 and permanent closure in 1900 while also noting the tank as temporarily out-of-service). PBS Registration No. 3-802158 was still noted as "active."
- NYSDEC Spills for the following incidents:
    - Spill No. 1710340 was reported on February 15, 2018 at Turbo Auto Sales when petroleum-impacted soil was encountered during removal of a 3,500-gallon No 2 heating Oil UST (Tank No 1 discussed above) east of the garage building at 372 Riverdale Avenue. About 220 tons of impacted soil was over-excavated and disposed of offsite. Post-excavation soil samples confirmed concentrations were below NYSDEC CP-51 soil cleanup levels of fuel oil impacted soil and the spill was closed by the NYSDEC on April 16, 2018. This spill is considered a historic REC (HREC).
    - Spill No Spill No. 2506149 was reported at "Mechanic Shop" on July 31, 2025 when motor oil from auto repair operations was reportedly flowing into street drains. Case notes also stated auto repair was being done on streets with associated oil staining noted. The spill remains open, is additional evidence of poor housekeeping by the former tenant, and is a REC as the leaks may have infiltrated cracks in the pavement and impacted sol, groundwater, and soil vapor at the subject property.
- Resource Conservation and Recovery Act (RCRA) Generator, Facility Index System (FINDS), and Enforcement and Compliance History Online (ECHO) databases as a Small Quantity Generator (SWG) in 1986 and a very small quantity generator (VSQG) in1993, 2006, and 2007 under Goodyear Auto Services. Waste types included ignitable waste and spent non-halogenated solvents, including xylene, acetone, ethyl acetate, ethyl

benzene, methyl isobutyl ketone, N-butyl alcohol, cyclohexanone, and methanol. Violations were not reported and the listing was not reclassified as a non-generator. Undocumented releases of hazardous substances and ignitable waste may have impacted soil groundwater, and soil vapor at the subject property. This REC was evaluated in the August 15, 2017 Phase II Limited Subsurface Investigation discussed in the following section.

The environmental database report is attached as Appendix F.

### 3.3 Prior Report Review

The following two previous reports were provided for review:

- June 7, 2017 Phase I Environmental Site Assessment Proposed CVS Pharmacy/Store No. 10386, 13 Culver Street and 372 Riverdale Avenue, prepared by T.M. Crowley & Associates, Inc.
- August 15, 2017 Phase II Limited Subsurface Investigation (SSI) Proposed CVS Pharmacy/Store No. 10386 13 Culver Street and 372 Riverdale Avenue, prepared by Ransom Consulting, Inc.

The Phase I identified several RECs related to the following:

- On-site automotive repair and associated drainage system, hydraulic lifts, vehicle storage, inactive oil-fired boiler, a 3,000-gallon fuel oil UST believed to have been removed at the time of the Phase I (but later confirmed to be the 3,500-gallon UST removed in 2018 discuss in Section 3.2), a former 550-gallon waste oil UST, and drum storage
- Residential fuel use at 13 Culver Street
- Potential fill from unknown sources
- Off-site gasoline service stations/auto repair facilities

The Phase II Limited SSI included the following:

- A geophysical survey that identified:
    - Backfilled excavation in southeast part of 372 Riverdale Avenue/Lot 30, which was assumed to be the location of the former 550-gallon waste oil UST.
    - UST-like anomaly east of the main garage (confirmed in 2018 to be a 3,500-gallon fuel oil UST removed during remediation of Spill No. 1710340)

  The geophysical survey attempted camera mapping of the drainage system, but was unable to do so because of built-up sediment at clean outs.
- 25 soil borings (24 at 372 Riverdale Avenue/Lot 30 and 1 at 13 Culver Street/Lot 26) and collection of 30 soil samples. Petroleum-like odors and photoionization detector (PID) readings of up to 6.8 parts per million (ppm) were noted in boring SB-23 in the southwest corner of the parking lot at 372 Riverdale Avenue/Lot 30; however, staining was not observed. Volatile organic compounds (VOCs) were either not detected or reported at concentrations below the SCOs. Several metals and semi volatile organic compounds (SVOCs) were reported at concentrations above NYSDEC Part 375 Unrestricted Use (UU)

and Restricted Use Restricted Residential (RURR) Soil Cleanup Objectives (SCOs). Polychlorinated biphenyls (PCBs) and pesticides each exceeded UU SCO in one sample, but not RURR SCOs. The noted concentrations in soil were attributed to fill quality. NYSDEC revised Part 375 SCOs in December 2025. Langan compared the data against the new SCOs and the following SCO exceedances were documented:

  - The VOC acetone in one soil sample in the northwest parking lot of 372 Riverdale Avenue/Lot 30
  - Several SVOCs above UU and/or RURR SCOs at various locations throughout the subject property between 0 and 1-foot bgs
  - Several metals above UU and/or RURR SCOs at various locations throughout the subject property at varying intervals to a max depth of 7.5 feet bgs
  - PCBs and pesticides each in one sample above UU SCOs, but below RURR SCOs

- Two temporary monitoring wells in the southwest corner of 372 Riverdale Avenue/Lot 30 and collection of two groundwater samples that identified several petroleum-related VOCs above NYSDEC Technical Operational and Guidance Series Ambient Water Quality Standards and Guidance Values (SGVs). Reported VOC concentrations were 2 to 3 orders of magnitude above the SGVs. The wells were noted by Ransom as "upgradient" to assess potential impacts from off-site; however, the west side of the site is at lower elevation than the east. The wells were located cross gradient from the south adjoining gasoline filling station across Culver Steet from the subject property.

The reports are included in Appendix B.

Based on the review of prior reports, Langan concludes that documented groundwater and soil contamination at the subject property is a REC. Soil vapor may also be impacted by VOCs, but was not sampled.

# 4. ADJOINING PROPERTIES AND SURROUNDING AREA

The following sections describe current and historical uses of and database listings for adjoining properties and the surrounding area.

## 4.1 Current Use of Adjoining Properties and Surrounding Area

The current use of adjoining and surrounding properties is summarized in Table 4-1

**Table 4-1 Current Use of Adjoining Properties and Surrounding Area**

| Direction | Adjoining Properties | Surrounding Area |
|---|---|---|
| **North** | Residential Properties | Residential, commercial, and institutional properties |
| **East** | Culver Park | Residential properties |
| **South** | Culver Street followed by a gasoline filling station (380 Riverdale Avenue) and residential properties | Residential and commercial properties |
| **West** | Riverdale Avenue/NYS Arterial followed by Nathaniel Hawthorne School | Residential properties |

Use of a south adjoining property at 380 Riverdale Avenue as a gasoline filling station is a REC (see Section 4.2 for additional information on this property).

## 4.2 Adjoining Properties and Surrounding Area History

Langan compiled the following summaries of the adjoining properties and surrounding area history based on a review of historical resources and interviews. Historical resources are provided in Appendix E.

**Table 4-2 Historical Use of Adjoining Properties**

| Direction | Adjoining Properties |
|---|---|
| North | Based on the Sanborn and topographic maps and aerial photos, north adjoining properties were developed with residences as early as 1898. Detached garages were added to several residences in the early to mid 1900s. |
| East | Based Sanborn and topographic maps, the east adjoining property was developed with one or more residences, stores, detached garages/stables as early as the late 1800s. Buildings were demolished prior to 1962 and Culver Park and playground was constructed. |
| South | Based on Sanborn and topographic maps, south adjoining properties across Culver Street were occupied by a railway car barn in the late 1800s, but by 1917 were redeveloped as several flat roofed buildings of unspecific or residential use with some detached garages. By 1974, 280 Riverdale Avenue was redeveloped as a gasoline filling station (Yonkers |

| | |
|---|---|
| | building records), which is still present. Langan considers the gasoline filling station at 280 Riverdale Avenue a REC; additional details are provided in Section 4.3. |
| West | Based on the review of Sanborn and topographic maps, Riverdale Avenue was narrower in the late 1800s and early/mid 1900s and then expanded in the late 1970s/early 1908s. Former properties within the current arterial included several residences (late 1800s – 1970s) and a realty co (1942), and a gasoline filling station (1951 – 1978). Nathanial Hawthorne school was constructed in the 1950s west of the arterial and is still present.<br><br>Langan considers the former gasoline filling station (1951-1978), within the current arterial, a REC as undocumented releases of petroleum products may have impacted groundwater and soil vapor at the subject property. |

Beyond adjoining properties, the surrounding area exhibited mixed residential, commercial, and institutional uses, including an auto sales and or repair/service station at a nearby cross-gradient property (290 Riverdale Avenue; about 175 feet south/crossgradient) from 1951- early 2000s.

### 4.3 Regulatory Database Review

Langan reviewed the environmental database report to evaluate if adjoining or surrounding area properties identified in the database report are suspected to represent an environmental concern for the subject property (see Section 8.2). Langan did not consider review of regulatory agency files necessary to evaluate potential RECs for the subject property unless discussed in Section 4.3.1 or 4.3.2 below.

#### *4.3.1 Adjoining Properties*

The following adjoining properties were identified in the database search.

*380 Riverdale Avenue as Citgo Station, Conoco Station, or Yonkers Fuel, Inc (south adjoining across Culver Street)*

- UST database for the following:
  - Three 6,000-galon USTs containing diesel or gasoline that were installed in 1973 and closed and removed in 2003
  - Three in-service 6,000-galon double walled USTs containing diesel or gasoline installed in 2003 with leak and overfill detection systems
- Spills for the following incidents:
  - Spill No. 0202712 (Citgo Station) was reported on June 13, 2002 after a tank test failure. After several years of inaction NYSDEC issued a Stipulation Agreement for the site. A 2019 remedial investigation identified "significant contamination;" however, concentrations were not specified. Multiple vacuum recovery events

were completed beginning in 2021. An air sparge/soil vapor extraction system was proposed, but case notes indicate related permit applications were rejected by the WCDOH. The most recent entries noted that in May 2023 VOCs were still "very high" in groundwater; however, concentrations were not provided, and in July 2024, a report was noted as "long overdue." The spill remains open and Langan has submitted a FOIA request.

- Spill No. 1804210 (Conoco Station) was reported on July 18, 2018 when a faulty meter was weeping fuel onto a dispenser line. Investigation and status notes for this incident are the same as the above spill. It appears that they are being investigated/remediated together; although the NYSDEC has not merged the case numbers. The spill remains open and Langan has submitted a FOIA request.

A gasoline filling station with open spill cases on a south adjoining property is considered a REC. As indicated in Section 3.3, contamination at this location may be contributing to VOC impacts to groundwater and soil vapor at the subject property.

*10 Culver Street (A south adjoining residence across Culver Street)*

NYSDEC Spill No. 9101603 was reported on April 26, 1991 when a small leak (about 2 gallons) was observed around a fill pipe. Sand was used to absorb the spill and in the incident was granted closed status on May 15, 1991. Based on the nature of the incident and closed status, it is not indicative of a REC.

*377 Riverdale Avenue (West adjoining within current arterial)*

This location was identified in the historic auto repair database. As stated in Section 4.2, this location was identified as a gasoline filling station. This former use is considered a REC as undocumented releases may be contributing to VOC impacts to groundwater and soil vapor at the subject property.

*Con Ed Manhole/Trench (west adjoining within Riverdale Avenue)*

This location was included in the RCRA generator database as non-generator, that previously generated hazardous waste containing lead in 2009. Violations were not reported. Based on waste type and lack of violations, this database listing is not indicative of a REC.

### *4.3.2 Surrounding Area*

Langan evaluated each of the database listings for surrounding area properties (see Section 8.2). Those warranting further discussion in the context of potential to represent an environmental concern for the subject property are discussed below.

*Accurate Plastics Inc at 18 Morris Place (about 525 feet northeast/upgradient)*

This facility was listed in the USEPA's PFAS ECHO database, which maintains a list of facilities that may handle PFAS as part of their typical operations. Undocumented releases of PFAS at this

location may have migrated and impacted area-wide groundwater in the vicinity of the subject property; therefore, this listing is indicative of a REC.

Other surrounding database listings are not expected to impact the subject property based on distance, inferred gradient, completed remediation, regulatory status, and/or nature of contamination.

## 5. CONCLUSIONS, FINDINGS, AND OPINIONS

Langan completed a Phase I ESA consistent with the scope and limitations of ASTM E1527-21 for the subject property at 372 Riverdale Avenue, Yonkers, NY, 10705. Exceptions to, or deletions from, ASTM E1527-21 are described in Section 8 of this report.

This assessment has revealed the RECs, CRECs, HRECs, de minimis conditions, and significant [??] data gaps presented in Table 5-1.

**Table ES-1 Conclusions, Findings and Opinions**

| **ASTM E1527-21 Scope Items** |
|---|
| **Recognized Environmental Conditions (RECs)** |
| *Former Auto Repair Operations, Open Spill, and Evidence of Poor Housekeeping at 372 Riverdale Avenue/Lot 30:* The building has been used for auto repair by multiple tenants since 1974. The most recent tenant vacated in April 2026 and evidence of poor housekeeping (staining, standing fluids, trash, and debris) was observed at various locations throughout 372 Riverdale Avenue/Lot 30. NYSDEC Spill No. 2506149 was reported on October 7, 2025 when motor oil was reportedly flowing from the site into to street drains. Case notes also indicated that auto repair work was conducted on the streets with oil leaks noted. The spill case remains open. Documented and undocumented releases of petroleum products or hazardous substances related to auto repair may have impacted soil, groundwater, and soil vapor. |
| *Hazardous Waste Generation - Auto Service Center at 372 Riverdale Avenue/Lot 30:* Lot 30 was identified as a SQG in 1986 and a CESQG in 1993, 2006, and 2007 of hazardous waste containing ignitable waste and spent nonhalogenated solvents including xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol. Manifests indicate hazardous waste shipments continued through 2012. No violations or non-compliance issues were reported and the listing was not reclassified as a non-generator. Undocumented releases of hazardous substances or hazardous waste may have impacted regional environmental conditions in the vicinity of the subject property. |
| *Documented Contamination at Subject Property:* An August 15, 2017 Phase II Limited Subsurface Investigation identified groundwater impacted with petroleum related VOCs at concentrations above NYSDEC SGVs and fill with metal and SVOCs at concentrations above NYSEC RURR SCOs. |
| *Current and Historical Use of Adjoining and Nearby Upgradient Properties and Related Open Spills:* Adjoining and/or nearby upgradient properties have been occupied by gasoline filling stations (1951- present) and a plastics manufacturer identified as a potential handler of per- and polyfluoroalkyl substances (PFAS). Two open petroleum spills are associated with the gasoline filling station at the south adjoining property at 380 Riverdale Avenue with "significant" impacts to groundwater, according to the NYSDEC case notes. Documented and undocumented |

| **ASTM E1527-21 Scope Items** |
|---|
| releases at these sites may have impacted regional environmental conditions in the vicinity of the subject property. |
| **Controlled Recognized Environmental Conditions (CRECs)** |
| Langan did not identify CRECs. |
| **Historical Recognized Environmental Conditions (HRECs)** |
| *On-Site Closed Spill:* Spill No. 1710340 was reported on February 15, 2018 at Turbo Auto Sales when petroleum-impacted soil was encountered during removal of a 3,500-gallon No 2 heating Oil UST east of the garage building at 372 Riverdale Avenue. About 220 tons of impacted soil was over-excavated and disposed offsite. Post-excavation soil samples confirmed concentrations were below NYSDEC CP-51 soil cleanup levels for fuel oil impacted soil and the spill was closed on April 16, 2018. |
| **Significant Data Gaps** |
| Significant data gaps were not encountered |

## 6. ENVIRONMENTAL PROFESSIONAL STATEMENT

I declare that I have the knowledge and skills, I meet the definition of an environmental professional as defined in Section 312.10 of 40 CFR Part 312.10(b), I have the specific qualifications based on education, training and experience to make a professional judgment regarding the scope of work and the data collected, and I have developed and implemented all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Robert Kovacs, PG, LSRP
Senior Associate (Environmental Professional)

Resumes outlining the qualifications of the project team are included in Appendix G.

## 7. REFERENCES

Langan used the following sources to complete this Phase I ESA.


- ASTM E1527-21, Standard Practice for Environmental Property Assessments: Phase I Environmental Property Assessment Process, published 16 November 2021
- EDR, Inc., Radius Map Report with GeoCheck, April 1, 2026
- EDR, Inc., City Directory Image Report, April 1, 2026
- EDR, Inc., Certified Sanborn Map Report, April 1, 2026
- EDR, Inc., Aerial Photo Decade Package, April 1, 2026
- EDR, Inc., Historical Topographic Map Report, April 1, 2026
- NYSDEC Bulk Storage Database Search, http://www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=4, searched April 20, 2026
- NYSDEC Spills Incidents Database Search, http://www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=2, searched April 20, 2026
- NYSDEC Info Locator, searched April 20, 2026
- USEPA ENVIROFACTS database: https://www3.epa.gov/enviro/, searched April 20, 2026
- June 7, 2017 Phase I Environmental Site Assessment Proposed CVS Pharmacy/Store No. 10386, 13 Culver Street and 372 Riverdale Avenue, prepared by T.M. Crowley & Associates, Inc.
- August 15, 2017 Phase II Limited Subsurface Investigation (SSI) Proposed CVS Pharmacy/Store No. 10386 13 Culver Street and 372 Riverdale Avenue, prepared by Ransom Consulting, Inc.
- Westchester County Tax Parcel Viewer with Yonkers.gov data, https://giswww.westchestergov.com/taxmaps/, Searched April 20, 2026


**Table 7-1 - Dates of Assessment Components**

| COMPONENT | DATE |
|---|---|
| **Interviews** | April 16 and 22, 2026 |
| **Review of government records** | April 15, 2026 |
| **Site reconnaissance** | April 16, 2026 |
| **Declaration by Environmental Professional** | April 24,2026 |

# 8. LIMITATIONS AND DEFINITIONS

This Phase I ESA report was prepared for Claudius Development LLC and is intended to be used in its entirety. Excerpts taken from this report are not necessarily representative of the assessment findings. The Client is the sole intended beneficiary of the report. The user requested no special terms or conditions regarding this Phase I ESA.

Langan's scope of services, which is described in Section 1.2 and in the contract executed between Langan and the Client, was limited to that agreed to with the Client/user and no other services beyond those explicitly stated are implied. To the extent possible, the services performed and agreed upon for this Phase I ESA are consistent with the guidelines of ASTM E1527-21.

This report is not intended to be an exhaustive assessment of the subject property. The purpose of the Phase I ESA is to reduce uncertainty about unknown conditions at the subject property. No environmental site assessment can wholly eliminate uncertainty regarding the potential for RECs in connection with a subject property. Therefore, Langan cannot "verify", "insure", "certify", or "guarantee" that the subject property is free of environmental concerns.

No expressed or implied representation or warranty is included or intended in this report, except that our services were completed using the care and skill ordinarily followed by professionals providing similar services under similar circumstances in similar locations at the same point in time.

The conclusions provided in this report are based solely on information obtained through completing the standard activities required by ASTM E1527-21 and are intended exclusively for the purpose stated herein, at the specified subject property, as it existed at the point in time the assessment was completed. The conclusions provided in this report do not apply to conditions and features of which Langan was not made aware of through good faith efforts to complete the activities required by ASTM E1527-21 and did not have the opportunity to evaluate.

## 8.1 ASTM Definitions

The following definitions are provided in ASTM E1527-21 and presented below for reference. This section is not a comprehensive list of definitions provided in ASTM E1527-21 and is intended to summarize those pertinent to this Phase I ESA report.

Activity and use limitations (AULs): legal or physical restrictions or limitations on the use of, or access to, a site or facility: (1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil, soil vapor, groundwater, and/or surface water on the property, or (2) to prevent activities that could interfere with the effective-ness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. These legal or physical restrictions, which may include institutional and/or engineering controls, are intended to prevent adverse impacts to individuals or populations that

may be exposed to hazardous substances and petroleum products in the soil, soil vapor, groundwater, and/or surface water on a property.

Adjoining properties: any real property or properties the border of which is contiguous partially contiguous with that of the subject property, or that would be contiguous or partially contiguous with that of the subject property but for a street, road, or other public thoroughfare separating them.

All Appropriate Inquiries: that inquiry constituting all appropriate inquiries into the previous ownership and uses of the subject property consistent with good commercial and customary practice as defined in CERCLA, 42 U.S.C.§ 9601(35)(B) and 40 C.F.R. Part 312, that will qualify a party to a commercial real estate transaction for one of the threshold criteria for satisfying the LLPs to CERCLA liability (42U.S.C. §§ 9601(35)(A) & (B), § 9607(b)(3), § 9607(q), and§ 9607(r)), assuming compliance with other elements of the defense.

Approximate minimum search distance: the area for which records must be obtained and reviewed pursuant to ASTM E1527-21 Section 8 subject to the limitations provided in that section. This may include areas outside the subject property and shall be measured from the nearest subject property boundary. This term is used in lieu of radius to include irregularly shaped properties.

Business environmental risk (BER): a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in this practice. Consideration of BER issues may involve addressing one or more non-scope considerations.

Controlled recognized environmental condition (CREC): recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations).

Data gap: a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to, site reconnaissance (for example, an inability to conduct the site visit), and interviews (for example, an inability to interview the key site manager, regulatory officials, etc.).

De minimis condition: a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A condition determined to be a de minimis condition is not a recognized environmental condition nor a controlled recognized environmental condition.

Engineering controls: physical modifications to a site or facility (for example, capping, slurry walls, or point of use water treatment) to reduce or eliminate the potential for exposure to hazardous substances or petroleum products in the soil or groundwater on a property. Engineering controls are a type of activity and use limitation (AUL).

Environment: environment shall have the same meaning as the definition of environment in CERCLA 42 U.S.C. § 9601(8).

Historical recognized environmental condition (HREC): previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations).A historical recognized environmental condition is not a recognized environmental condition.

Institutional controls (IC): a legal or administrative mechanism (for example, "deed restrictions," restrictive covenants, easements, or zoning) on the use of, or access to, a site or facility to (1) reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the property, or (2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment. An institutional control is a type of activity and use limitation (AUL).

Key site manager: the person identified by the owner or operator of a subject property as having good knowledge of the uses and physical characteristics of the subject property.

Material threat: obvious threat which is likely to lead to a release and that, in the opinion of the environmental professional, would likely result in impact to public health or the environment.

Obvious: that which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer.

Property use limitation: limitation or restriction on current or future use of a property in connection with a response to a release, in accordance with the applicable regulatory authority or authorities that allows hazardous sub-stances or petroleum products to remain in place at concentrations exceeding unrestricted use criteria.

Reasonably ascertainable: information that is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable.

Recognized environmental conditions: (1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due

to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. For the purposes of this definition, "likely" is that which is neither certain nor proved, but can be expected or believed by a reasonable observer based on the logic and/or experience of the environmental professional, and/or available evidence, as stated in the report to support the opinions given therein.

Release: a release of any hazardous substance or petroleum product shall have the same meaning as the definition of "release" in CERCLA 42 U.S.C. § 9601(22). There are a number of statutory exclusions from the definition of release that may impact the environmental professional's opinions and conclusions, such as the normal application of fertilizer.

Significant data gap: a data gap that affects the ability of the environmental professional to identify a recognized environmental condition.

Site reconnaissance: that part that is contained in Section 9 of ASTM E1527-21 and addresses what should be done in connection with the site visit. The site reconnaissance includes, but is not limited to, the site visit done in connection with such a Phase I Environmental Site Assessment.

Site visit: the visit of the subject property during which observations are made constituting the site reconnaissance section of this practice.

Subject property: the property that is the subject of the environmental site assessment described in this practice.

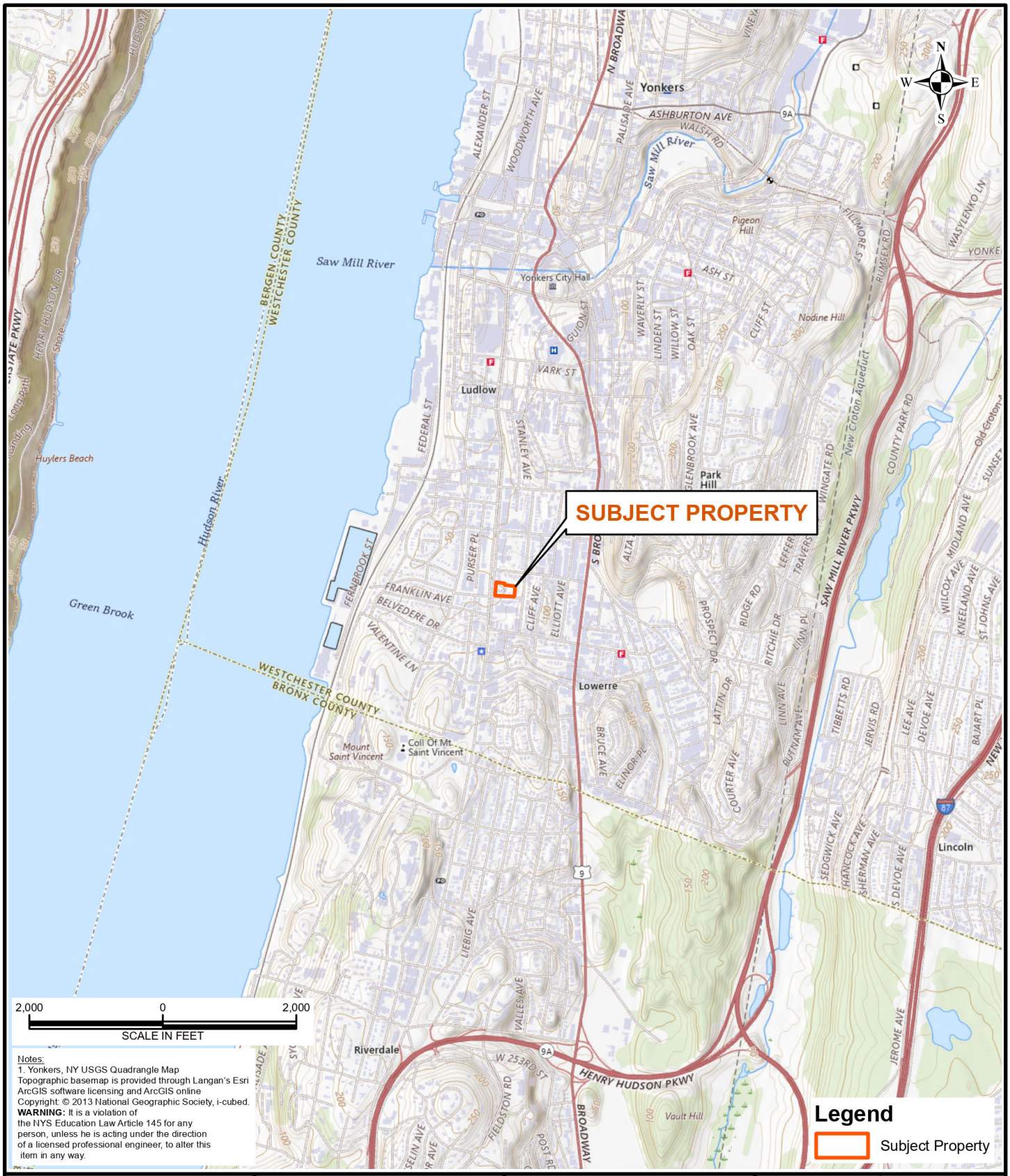
User: the party seeking to use ASTM E1527-21 to complete an environmental site assessment of the subject property.

**8.2 Standard Environmental Record Sources**

Langan reviewed an environmental database search report prepared by an environmental database search provider for the subject property and surrounding area. The database search report includes a listing of properties identified on select federal, state, local and tribal standard source environmental databases within the approximate minimum search radii outlined in ASTM E1527-21. This information was supplied to Langan by the environmental database search provider, and to the environmental database search provider by government sources; therefore, neither Langan nor the environmental database search provider can verify the completeness and accuracy of the database information. Appendix F contains a copy of the report, with specific source and property descriptions, and the dates of the last update for each database searched. Langan reviewed the database search report on a record-by-record basis to evaluate if certain properties identified in the database report are likely to represent an environmental concern for the subject property. The evaluation criteria included factors such as distance, groundwater gradient, nature of the listing, and regulatory status. Unless specifically discussed in the body of

this report, the facilities listed on the database do not appear to represent an environmental concern to the subject property.

# APPENDIX A




Notes:
1. Yonkers, NY USGS Quadrangle Map
Topographic basemap is provided through Langan's Esri ArcGIS software licensing and ArcGIS online
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**WARNING:** It is a violation of the NYS Education Law Article 145 for any person, unless he is acting under the direction of a licensed professional engineer, to alter this item in any way.

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Project
**372 RIVERDALE AVENUE AND 13 CULVER STREET**
YONKERS
WESTCHESTER COUNTY NEW YORK

Figure Title
**SUBJECT PROPERTY LOCATION MAP**

| Project No. | Figure |
|---|---|
| 190141301 | 1 |
| Date: 4/21/2026 | |
| Scale: 1" = 2,000 feet | |
| Drawn By: MG | |

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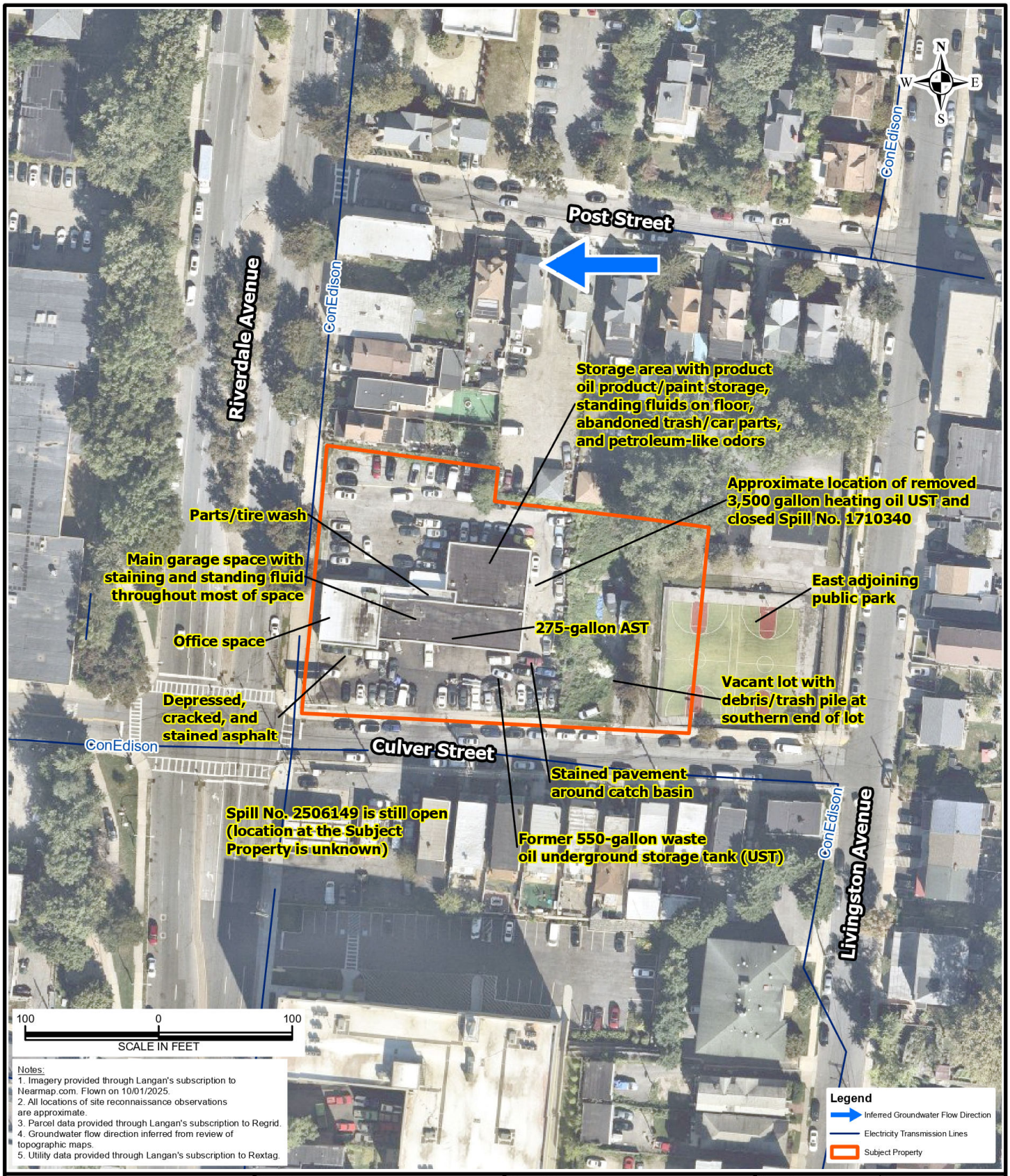
Path: \\langan.com\data\WPW\data3\190141301\Project Data\ArcGIS\APRX\190141301\190141301.aprx





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Project
372 RIVERDALE AVENUE AND 13 CULVER STREET
YONKERS
WESTCHESTER COUNTY NEW YORK

Figure Title
SUBJECT PROPERTY LAYOUT

Project No. 190141301
Date 6/2/2026
Scale 1" = 100 feet
Drawn By MG

Figure 2

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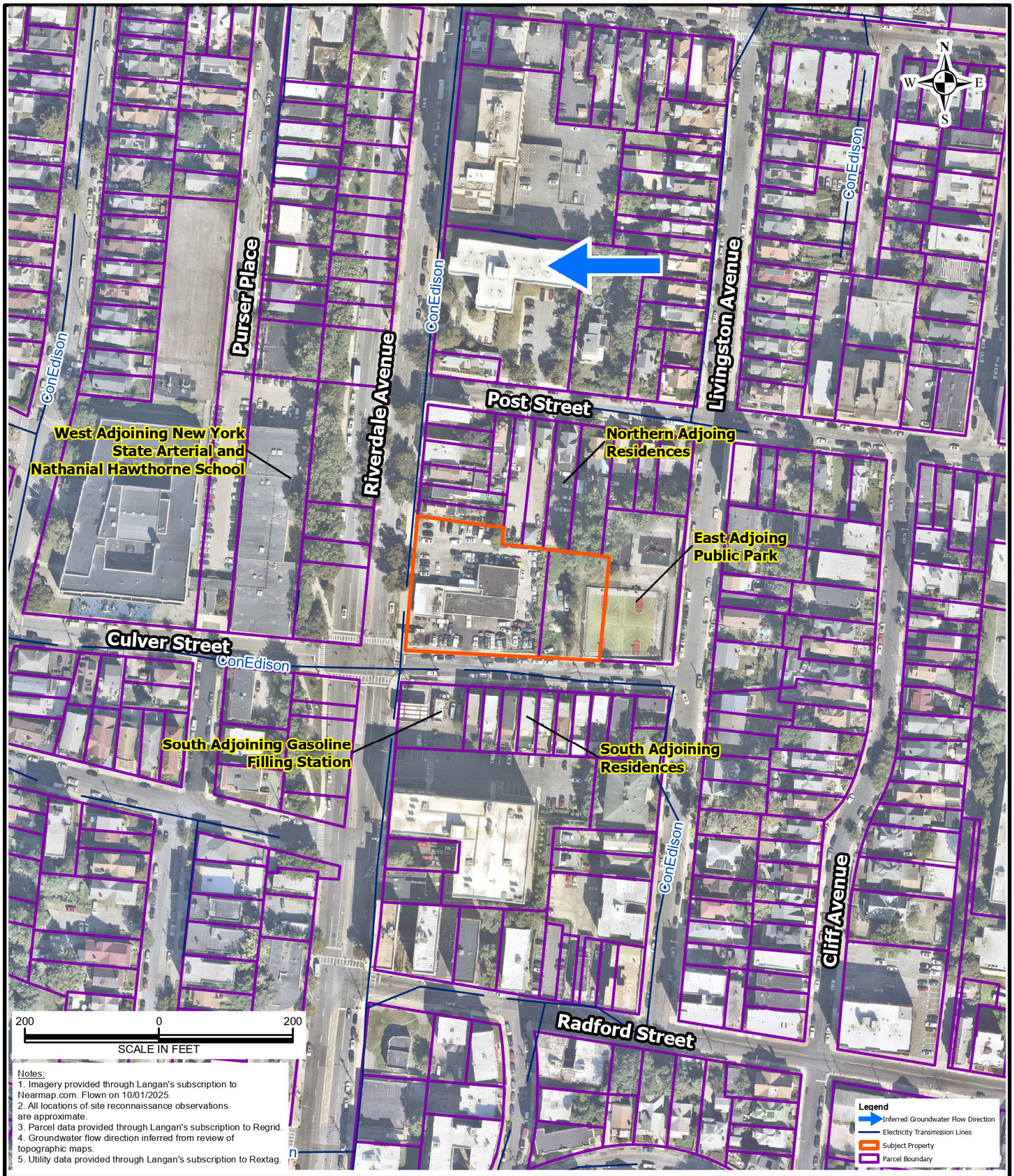
Path: \\langan.com\data\WPW\data3\190141301\Project Data\ArcGIS\APRX\190141301\190141301.aprx





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Project

372 RIVERDALE AVENUE AND 13 CULVER STREET

YONKERS

WESTCHESTER COUNTY NEW YORK

Figure Title

NEARBY PROPERTIES MAP

| | |
|---|---|
| Project No. | 190141301 |
| Date | 4/21/2026 |
| Scale | 1" = 200 feet |
| Drawn By | MG |

Figure 3

© 2023 Langan

Path: \\langan.com\data\WPW\data3\190141301\Project Data\ArcGIS\APRX\190141301\190141301.aprx

# APPENDIX B

# Property Description Report For: 13 Culver St, Municipality of City of Yonkers



| | | | |
|---|---|---|---|
| **Status:** | Active | | |
| **Roll Section:** | Taxable | | |
| **Swis:** | 551800 | | |
| **Tax Map ID #:** | 1.-129-26 | | |
| **Property Class:** | 230 - 3 Family Res | | |
| **Site:** | RES 1 | | |
| **In Ag. District:** | No | | |
| **Site Property Class:** | 230 - 3 Family Res | | |
| **Zoning Code:** | BA - GenBus&AptsHDen | | |
| **Neighborhood Code:** | 00002 - Radford | | |
| **Total Acreage/Size:** | 0.17 | **School District:** | Yonkers |
| **Land Assessment:** | 2026 - $5,000<br>2025 - $5,000 | **Total Assessment:** | 2026 - $5,800<br>2025 - $5,800 |
| **Full Market Value:** | 2026 - $411,300<br>2025 - $337,200 | | |
| **Equalization Rate:** | 2026 - 1.41%<br>2025 - 1.72% | **Property Desc:** | |
| **Deed Book:** | 64113 | **Deed Page:** | 3153 |
| **Grid East:** | 657859 | **Grid North:** | 760480 |

## Area

| | | | |
|---|---|---|---|
| **Living Area:** | 1,320 sq. ft. | **First Story Area:** | 0 sq. ft. |
| **Second Story Area:** | 0 sq. ft. | **Half Story Area:** | 0 sq. ft. |
| **Additional Story Area:** | 0 sq. ft. | **3/4 Story Area:** | 0 sq. ft. |
| **Finished Basement:** | 0 sq. ft. | **Number of Stories:** | 2.5 |
| **Finished Rec Room** | 0 sq. ft. | **Finished Area Over Garage** | 0 sq. ft. |

## Structure

| | | | |
|---|---|---|---|
| **Building Style:** | Old style | **Bathrooms (Full - Half):** | 3 - 0 |
| **Bedrooms:** | 6 | **Kitchens:** | 3 |
| **Fireplaces:** | 0 | **Basement Type:** | Full |
| **Porch Type:** | Porch-open/deck | **Porch Area:** | 165.00 |
| **Basement Garage Cap:** | 0 | **Attached Garage Cap:** | 0.00 sq. ft. |
| **Overall Condition:** | Normal | **Overall Grade:** | Average |
| **Year Built:** | 1900 | **Eff Year Built:** | |

## Owners

Dutchman Realty II LLC
P.O. Box 362
Yonkers NY 10703

## Sales

| Sale Date | Price | Property Class | Sale Type | Prior Owner | Value Usable | Arms Length | Addl. Parcels | Deed Book and Page |
|---|---|---|---|---|---|---|---|---|
| 5/31/2024 | $10 | 230 - 3 Family Res | Land & Building | Dutchman Realty LLC | No | No | No | 64113/3153 |
| 2/3/2017 | $200,000 | 230 - 3 Family Res | Land & Building | 15 Culver St Realty Corp | Yes | Yes | No | 57024/3533 |
| 10/20/2014 | $2,500 | 230 - 3 Family Res | Land & Building | Freeman, Lucy | Yes | No | No | 54281/3023 |
| 4/12/2004 | $10 | 230 - 3 Family Res | Land & Building | Freeman, Floyd | No | No | No | 44170/1623 |
| 1/19/1995 | $10 | 230 - 3 Family Res | Land & Building | Mcneil, Lillie Mae | No | No | No | 11362/237 |

## Utilities

| | | | |
|---|---|---|---|
| **Sewer Type:** | Comm/public | **Water Supply:** | Comm/public |
| **Utilities:** | Gas & elec | **Heat Type:** | Hot wtr/stm |
| **Fuel Type:** | Oil | **Central Air:** | No |

## Improvements

| Structure | Size | Grade | Condition | Year |
|---|---|---|---|---|
| Porch-open/deck | 15 × 11 | Average | Normal | 1900 |
| Porch-open/deck | 22 × 6 | Average | Normal | 1900 |
| Porch-coverd | 13 × 6 | Average | Normal | 1900 |

## Land Types

| Type | Size |
|---|---|
| Primary | 7,680.00 sq ft |

## Special Districts for 2026

| Description | Units | Percent | Type | Value |
|---|---|---|---|---|
| CC001-City charge un ft | 76 | 0% | | 0 |
| CC002-City charge hsg u | 3 | 0% | | 0 |
| CC004-Safety insp fee | 375 | 0% | | 0 |
| CS002-So yonkers sewer | 0 | 0% | | 0 |
| CW001-Solid waste dist | 0 | 0% | | 0 |

## Special Districts for 2025

| Description | Units | Percent | Type | Value |
|---|---|---|---|---|
| CC001-City charge un ft | 76 | 0% | | 0 |
| CC002-City charge hsg u | 3 | 0% | | 0 |
| CC004-Safety insp fee | 375 | 0% | | 0 |
| CS002-So yonkers sewer | 0 | 0% | | 0 |
| CW001-Solid waste dist | 0 | 0% | | 0 |

## Exemptions

| Year | Description | Amount | Exempt % | Start Yr | End Yr | V Flag | H Code | Own % |
|---|---|---|---|---|---|---|---|---|

# Taxes

| Year | Description | Amount |
|---|---|---|

*** Taxes reflect exemptions, but may not include recent changes in assessment.**

# Property Description Report For: 372 Riverdale Ave, Municipality of City of Yonkers




| | | | |
|---|---|---|---|
| **Status:** | Active | | |
| **Roll Section:** | Taxable | | |
| **Swis:** | 551800 | | |
| **Tax Map ID #:** | 1.-129-30 | | |
| **Property Class:** | 431 - Auto dealer | | |
| **Site:** | COM 1 | | |
| **In Ag. District:** | No | | |
| **Site Property Class:** | 431 - Auto dealer | | |
| **Zoning Code:** | BA - GenBus&AptsHDen | | |
| **Neighborhood Code:** | 00002 - Radford | | |
| **Total Acreage/Size:** | 0.85 | **School District:** | Yonkers |
| **Land Assessment:** | 2026 - $16,000<br>2025 - $16,000 | **Total Assessment:** | 2026 - $23,700<br>2025 - $23,700 |
| **Full Market Value:** | 2026 - $1,680,900<br>2025 - $1,377,900 | | |
| **Equalization Rate:** | 2026 - 1.41%<br>2025 - 1.72% | **Property Desc:** | |
| **Deed Book:** | 64113 | **Deed Page:** | 3182 |
| **Grid East:** | 657712 | **Grid North:** | 760504 |

## Owners

Dutchman Realty II LLC
P.O. Box 362
Yonkers NY 10703

## Sales

| Sale Date | Price | Property Class | Sale Type | Prior Owner | Value Usable | Arms Length | Addl. Parcels | Deed Book and Page |
|---|---|---|---|---|---|---|---|---|
| 5/31/2024 | $10 | 431 - Auto dealer | Land & Building | Romano, Mary Louise | No | No | No | 64113/3182 |
| 5/28/2013 | $10 | 433 - Auto body | Land & Building | Romano, Mary Louise | No | No | No | 53148/3487 |
| 2/14/2012 | $10 | 433 - Auto body | Land & Building | Romano, Mary Louise | No | No | No | 52041/3086 |
| 11/1/2003 | $10 | 433 - Auto body | Land & Building | Romano, Marylouise | No | No | No | 44071/1229 |
| 9/5/2003 | $10 | 433 - Auto body | Land & Building | Romano, Mary | No | No | Yes | 43251/326 |
| 6/1/2000 | $10 | 433 - Auto body | Land & Building | Romano, Mary | No | No | Yes | 40168/64 |
| 2/1/1989 | $10 | 433 - Auto body | Land & Building | Luma, Realty Inc | No | No | No | 9586/210 |

## Utilities

| | | | |
|---|---|---|---|
| **Sewer Type:** | Comm/public | **Water Supply:** | Comm/public |
| **Utilities:** | Gas & elec | | |

## Inventory

| | | | |
|---|---|---|---|
| **Overall Eff Year Built:** | 0 | **Overall Condition:** | Normal |
| **Overall Grade:** | Average | **Overall Desirability:** | 3 |

## Buildings

| AC% | Sprinkler% | Alarm% | Elevators | Basement Type | Year Built | Eff Year Built | Condition | Quality | Gross Floor Area (sqft) | Stories | Num Indent Bldgs |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 0 | 0 | | 1973 | | Normal | Average | 8695 | 1 | 1 |

## Site Uses

| Use | Rentable Area (sqft) | Total Units |
|---|---|---|
| Usd-car sale | 8,695 | 1 |

## Improvements

| Structure | Size | Grade | Condition | Year |
|---|---|---|---|---|

## Land Types

| Type | Size |
|---|---|
| Primary | 36,873.00 sq ft |

## Special Districts for 2026

| Description | Units | Percent | Type | Value |
|---|---|---|---|---|
| CC001-City charge un ft | 366 | 0% | | 0 |
| CC004-Safety insp fee | 1125 | 0% | | 0 |
| CS002-So yonkers sewer | 0 | 0% | | 0 |
| CW001-Solid waste dist | 0 | 0% | | 0 |

## Special Districts for 2025

| Description | Units | Percent | Type | Value |
|---|---|---|---|---|
| CC001-City charge un ft | 366 | 0% | | 0 |
| CC004-Safety insp fee | 1125 | 0% | | 0 |
| CS002-So yonkers sewer | 0 | 0% | | 0 |
| CW001-Solid waste dist | 0 | 0% | | 0 |

## Exemptions

| Year | Description | Amount | Exempt % | Start Yr | End Yr | V Flag | H Code | Own % |
|---|---|---|---|---|---|---|---|---|

# Taxes

| Year | Description | Amount |
|---|---|---|

*** Taxes reflect exemptions, but may not include recent changes in assessment.**

# APPENDIX C

LANGAN

# Site Reconnaissance Photographs

| Client Name: | Subject Property Location: | Project No. |
|---|---|---|
| Claudius Development LLC | 372 Riverdale Avenue and 13 Culver Street<br>Yonkers, New York | 190141301 |

| Date | Photo No. |
|---|---|
| 04/16/2026 | 1 |

**Direction Photo Taken:**

Northwest

**Description:**

Vacant auto repair facility at 372 Riverdale Avenue; stained pavement and trash/tires throughout parking lot.




| Date | Photo No. |
|---|---|
| 04/16/2026 | 2 |

**Direction Photo Taken:**

Northwest

**Description:**

Vacant auto repair facility at 372 Riverdale Avenue; stained pavement and trash/tires throughout parking lot



| LANGAN | Site Reconnaissance Photographs | |
|---|---|---|
| **Client Name:**<br>**Claudius Development LLC** | **Subject Property Location:**<br>**372 Riverdale Avenue and 13 Culver Street**<br>**Yonkers, New York** | **Project No.**<br>**190141301** |

| **Date** | **Photo No.** |
|---|---|
| 04/16/2026 | 3 |

**Direction Photo Taken:**

North

**Description:**

Abandoned car and stained pavement around catch basin at east end of vacant auto repair building



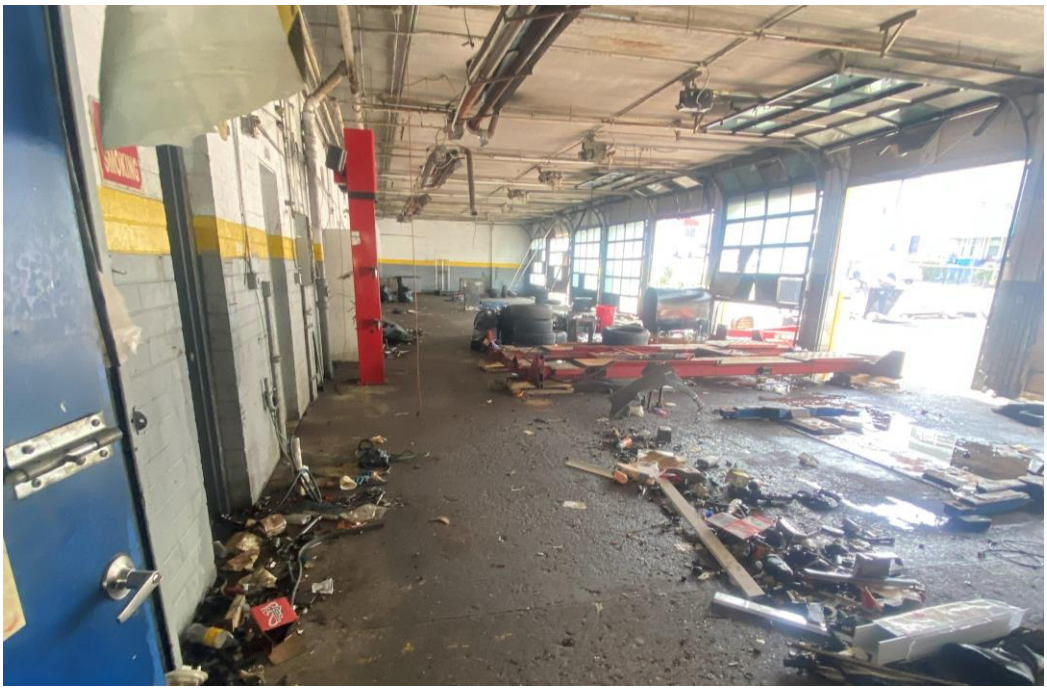
| **Date** | **Photo No.** |
|---|---|
| 06/16/2026 | 4 |

**Direction Photo Taken:**

East

**Description:**

Main garage area in vacant auto repair building; standing fluid, stained concrete, and trash/debris throughout



LANGAN

# Site Reconnaissance Photographs

| Client Name: | Subject Property Location: | Project No. |
|---|---|---|
| Claudius Development LLC | 372 Riverdale Avenue and 13 Culver Street<br>Yonkers, New York | 190141301 |

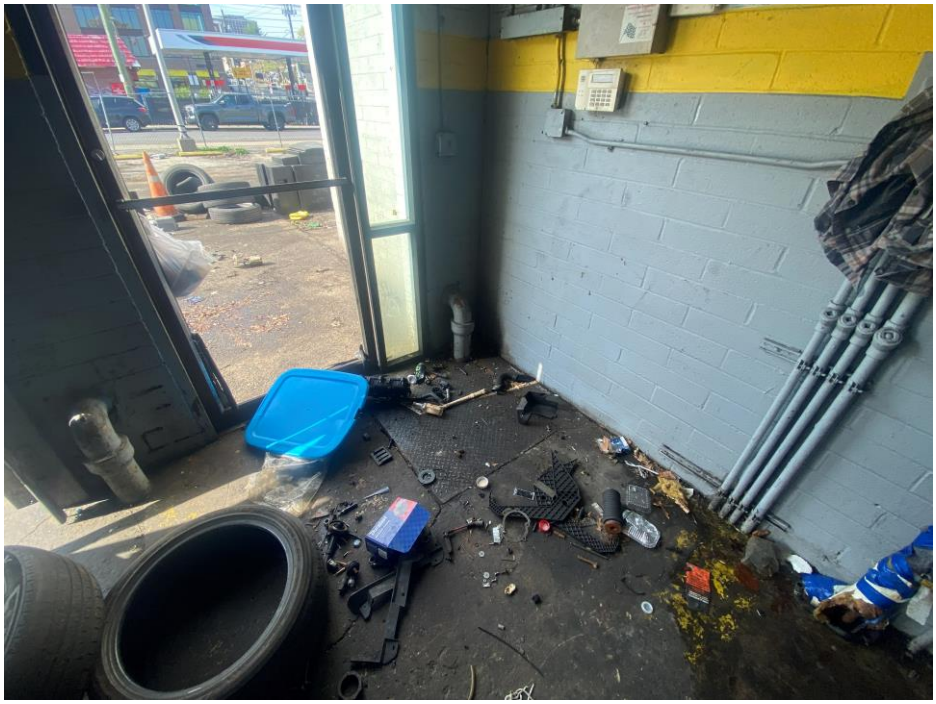
| Date | Photo No. |
|---|---|
| 04/16/2026 | 5 |

**Direction Photo Taken:**

Southwest

**Description:**

Leaking hose at west end of main garage contributing to standing fluids



| Date | Photo No. |
|---|---|
| 04/16/2026 | 6 |

**Direction Photo Taken:**

North

**Description:**

Auto lift in center of garage



LANGAN

# Site Reconnaissance Photographs

| Client Name: | Subject Property Location: | Project No. |
|---|---|---|
| Claudius Development LLC | 372 Riverdale Avenue and 13 Culver Street<br>Yonkers, New York | 190141301 |

| Date | Photo No. |
|---|---|
| 04/16/2026 | 7 |

**Direction Photo Taken:**

East

**Description:**

Standing fluids and above ground storage tank (AST) with unknown contents in center of main garage



| Date | Photo No. |
|---|---|
| 04/16/2026 | 8 |

**Direction Photo Taken:**

West

**Description:**

Floor under AST in center of main garage



LANGAN

# Site Reconnaissance Photographs

| Client Name: | Subject Property Location: | Project No. |
|---|---|---|
| Claudius Development LLC | 372 Riverdale Avenue and 13 Culver Street<br>Yonkers, New York | 190141301 |

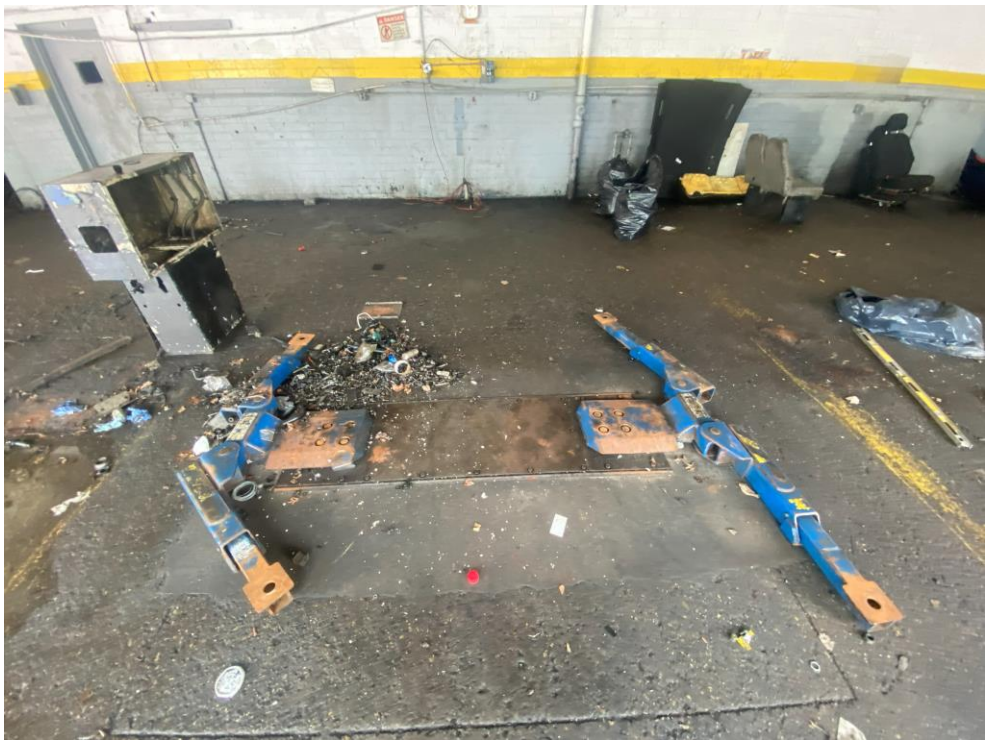
| Date | Photo No. |
|---|---|
| 04/16/2026 | 9 |

**Direction Photo Taken:**

North

**Description:**

Disconnected lift and hydraulic reservoir in main garage



| Date | Photo No. |
|---|---|
| 04/16/2026 | 10 |

**Direction Photo Taken:**

Northeast

**Description:**

Abandoned auto repair products, including some open containers, in storage area north of the main garage. Petroleum-like odors were evident throughout the room.



LANGAN

# Site Reconnaissance Photographs

| Client Name: | Subject Property Location: | Project No. |
|---|---|---|
| Claudius Development LLC | 372 Riverdale Avenue and 13 Culver Street<br>Yonkers, New York | 190141301 |

| Date | Photo No. |
|---|---|
| 04/16/2026 | 11 |

**Direction Photo Taken:**

Northwest

**Description:**

Abandoned auto parts, products, and trash in western part of north storage area



| Date | Photo No. |
|---|---|
| 04/16/2026 | 12 |

**Direction Photo Taken:**

North

**Description:**

Trash and standing fluid and east end of north storage area



| Client Name: | Subject Property Location: | Project No. |
|---|---|---|
| Claudius Development LLC | 372 Riverdale Avenue and 13 Culver Street<br>Yonkers, New York | 190141301 |

| Date | Photo No. |
|---|---|
| 04/16/2026 | 13 |

**Direction Photo Taken:**

Northeast

**Description:**

Paints and compressed air tank in northeast part of north storage area



| Date | Photo No. |
|---|---|
| 04/16/2026 | 14 |

**Direction Photo Taken:**

Northeast

**Description:**

Utility sink/tire wash in northwest part of main garage



LANGAN

# Site Reconnaissance Photographs

| Client Name: | Subject Property Location: | Project No. |
|---|---|---|
| Claudius Development LLC | 372 Riverdale Avenue and 13 Culver Street<br>Yonkers, New York | 190141301 |

| Date | Photo No. |
|---|---|
| 04/16/2026 | 15 |

**Direction Photo Taken:**

Northeast

**Description:**

Depressed, cracked, and stained asphalt in western part of main parking lot at 372 Riverdale Avenue



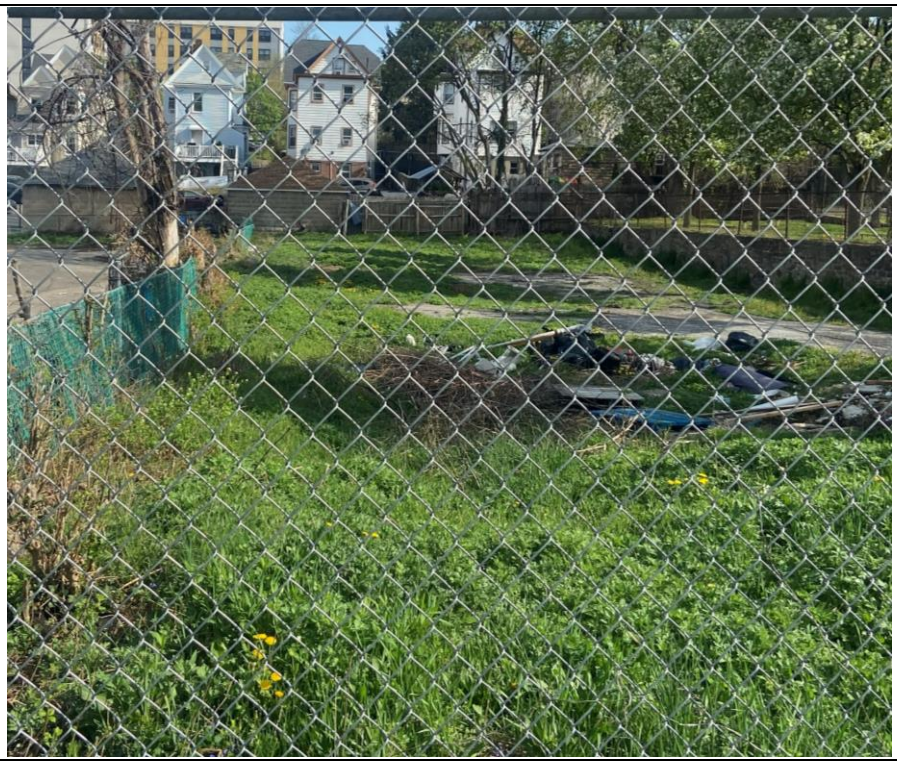

| Date | Photo No. |
|---|---|
| 04/16/2026 | 16 |

**Direction Photo Taken:**

North

**Description:**

Vacant lot and location of former residential building at 13 Culver Street. Trash/debris (e.g wood, piping, household items, and plastic bags of unknown contents) is visible in southern part of lot.



| LANGAN | Site Reconnaissance Photographs | |
|---|---|---|
| **Client Name:**<br>**Claudius Development LLC** | **Subject Property Location:**<br>**372 Riverdale Avenue and 13 Culver Street**<br>**Yonkers, New York** | **Project No.**<br>**190141301** |

| **Date** | **Photo No.** |
|---|---|
| 04/26/2026 | 17 |

**Direction Photo Taken:**

Southeast

**Description:**

South adjoining gasoline filling station and residential buildings across Culvert Street from Subject Property



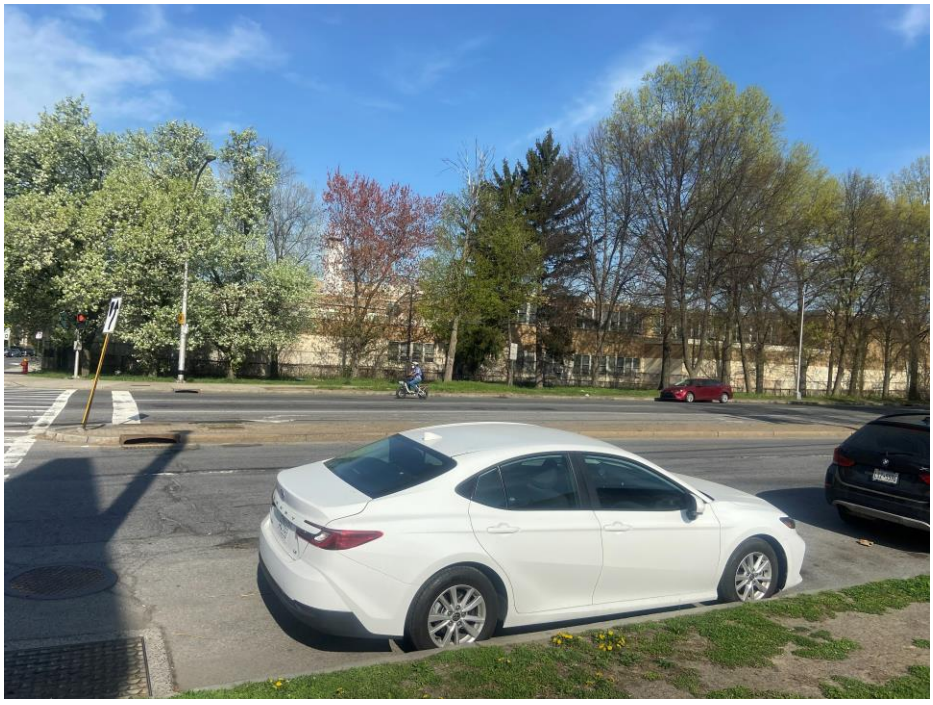

| **Date** | **Photo No.** |
|---|---|
| 04/16/2026 | 18 |

**Direction Photo Taken:**

West

**Description:**

West adjoining Nathanial Hawthorne School across Riverdale Avenue from Subject Property



LANGAN

# Site Reconnaissance Photographs

| Client Name: | Subject Property Location: | Project No. |
|---|---|---|
| Claudius Development LLC | 372 Riverdale Avenue and 13 Culver Street<br>Yonkers, New York | 190141301 |

| Date | Photo No. |
|---|---|
| 04/16/2026 | 19 |

**Direction Photo Taken:**

Northeast

**Description:**

Northern parking lot at 372 Riverdale Avenue (subject property) and northern adjoining residential buildings beyond wood fence.



| Date | Photo No. |
|---|---|
| 04.16/2026 | 20 |

**Direction Photo Taken:**

Southeast

**Description:**

East adjoining park beyond vacant lot at 13 Culver Street.



LANGAN

**PHASE I ESA SITE RECONNAISSANCE CHECKLIST**

**GENERAL INFORMATION**

Langan personnel: Jennifer Armstrong
Date of site reconnaissance: April 16, 2026
Business name / subject property occupant: Vacant
Full subject property address: 372 Riverdale Avenue and 13 Culver Street
Weather conditions: Sunny (upper 70s/low 80s)

| Features, Activities, Uses, and Conditions | Identified/Observed? | | | | Report Section(s) |
|---|---|---|---|---|---|
| **General Subject Property Setting** | **Yes** | | **No** | | |
| Current use(s) of the subject property | ☒ | | ☐ | | 2.0 |
| Past use(s) of the subject property | ☒ | | ☐ | | 3.1 |
| Current use(s) of adjoining properties | ☒ | | ☐ | | 4.1 |
| Past use(s) of adjoining properties | ☐ | | ☒ | | 4.2 |
| Current or past uses in the surrounding area | ☒ | | ☐ | | 4.1 and 4.2 |
| Geologic, hydrogeologic, hydrologic, and topographic conditions | ☒ | | ☐ | | 2.2 |
| Structures and other improvements at the subject property | ☒ | | ☐ | | 2.3 |
| Roads | ☒ | | ☐ | | 2.3 |
| Potable water supply/source for the subject property | ☒ | | ☐ | | 2.4 |
| Sewage disposal system for the subject property | ☒ | | ☐ | | 2.4 |
| **Interior/Exterior Features** | **At Interior?** | | **At Exterior?** | | **Report Section(s) (if yes)** |
| | **Yes** | **No** | **Yes** | **No** | |
| Hazardous substances and petroleum products in connection with identified uses | ☒ | ☐ | ☒ | ☐ | 2.5 |
| Storage tanks | ☒ | ☐ | ☐ | ☒ | 2.5.1 and 2.5.2 |
| Strong, pungent, or noxious odors and their sources | ☒ | ☐ | ☐ | ☒ | 2.6 |
| Standing surface water and pools or sumps containing liquids likely to be hazardous substances or petroleum products | ☒ | ☐ | ☐ | ☒ | 2.5 |
| Drums, totes, and intermediate bulk containers | ☐ | ☒ | ☐ | ☒ | 2.5.3 |
| Hazardous substance and petroleum product containers not in connection with identified uses | ☐ | ☒ | ☐ | ☒ | 2.5.4 |
| Unidentified substance containers | ☐ | ☒ | ☐ | ☒ | 2.5.4 |
| PCB-containing items | ☐ | ☒ | ☐ | ☒ | 2.5.4 |
| Heating/cooling | ☒ | ☐ | ☐ | ☒ | 2.4 |
| Stains or corrosion on floors, walls, or ceilings | ☒ | ☐ | ☒ | ☐ | 2.5 and 2.7 |
| Drains and sumps | ☒ | ☐ | ☒ | ☐ | 2.8 |
| Pits, ponds, or lagoons | ☐ | ☒ | ☐ | ☒ | 2.2.3 |
| Stained soil or pavement | ☒ | ☐ | ☒ | ☐ | 2.5 and 2.7 |
| Stressed vegetation | ☐ | ☒ | ☐ | ☒ | 2.9 |
| Solid waste | ☒ | ☐ | ☒ | ☐ | 2.7 |
| Water/wastewater | ☒ | ☐ | ☒ | ☐ | 2.8 and 2.9 |
| Wells | ☐ | ☒ | ☐ | ☒ | 2.2.3 |
| Septic systems or cesspools | ☐ | ☒ | ☐ | ☒ | 2.8 |

# APPENDIX D

**PHASE I ENVIRONMENTAL SITE ASSESSMENT**
**PROPOSED CVS PHARMACY/STORE NO. 10386**
**13 CULVER STREET AND 372 RIVERDALE AVENUE**
**SECTION 1, BLOCK 129, LOTS 26 AND 30**
**CITY OF YONKERS, WESTCHESTER COUNTY, NEW YORK**

Prepared for:

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island 02895-6146

and

T.M. Crowley & Associates, Inc.
14 Breakneck Hill Road, Suite 101
Lincoln, Rhode Island 02865

Prepared by:

**Ransom Consulting, Inc.**
2127 Hamilton Avenue
Hamilton, New Jersey 08619
(609) 584-0090
Ransom Project No. 111.02013

June 7, 2017

## EXECUTIVE SUMMARY

The following report presents the findings of a Phase I Environmental Site Assessment (ESA) performed by Ransom Consulting, Inc. (Ransom) for the properties located at 13 Culver Street and 372 Riverdale Avenue in the City of Yonkers, New York (the "Site"), which includes Section 1, Block 129, Lots 26 and 30, respectively. This Phase I ESA was conducted in accordance with the scope and limitations of ASTM International E 1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and Ransom's Corporate Services Agreement with CVS Pharmacy, Inc. (CVS) dated April 1, 2015 (the "Corporate Services Agreement"). The purpose of this Phase I ESA was to evaluate the environmental condition of the Site for evidence of a release or threat of release of hazardous substances or petroleum products (HSP) and to provide our professional opinion regarding evidence of recognized environmental conditions (RECs) in connection with the Site.

The Site consists of one 8,695 square-foot commercial structure (the "Lot 30 Site Building"), constructed sometime in 1974 on the 372 Riverdale Avenue (Lot 30) portion of the Site, a 1,320 square-foot residential structure with a basement (the "Residential Building") on the 13 Culver Street (Lot 26) portion of the Site (collectively, the Site Buildings), asphalt paved parking surfaces, and areas of limited landscaping. The Site is located in a mixed commercial and residential area of the City of Yonkers.

The Lot 30 Site Building recently operated as a Goodyear-branded automotive repair shop and tire sales center from 1974 until sometime in 2015. The Lot 30 Site Building is currently occupied by the West Coast Auto Sales company, who have utilized the Site for the sale of used cars since sometime in 2016. The Residential Building on-Site was constructed sometime prior to 1897 and has been vacant since sometime in 2009.

Prior to development of the Lot 30 Site Building in 1974, the entire Site consisted of ten residential structures, one of which was removed by 1951, and six of which were removed circa 1973. Commercial improvements (i.e., an additionally parking area) to the Lot 30 portion of the Site were completed in June of 1980, at which time two more residential structures located to the north of the Lot 30 Site Building were removed from the Site and a paved parking area was installed. The Residential Building located on the Lot 26 portion of the Site is the only remaining residential structure on-Site.

The Site is bordered by residential properties to the north and Culver Park to the east. The PEARLS Hawthorne School is located to the west of the Site, across Riverdale Avenue. To the south of the Site, across Culver Street, is a Citgo-branded gasoline filling station and residential properties. Further south of the Citgo-branded gasoline filling station is the Devonshire Discount Tire, Auto Body & Repair Center.

A total of 15 current, sealed, or former floor drains, one former/inactive 4-inch cast iron drainage pipe, one 6-inch cast iron drainage pipe, and one grease/sand interceptor were either observed within the Lot 30 Site Building or depicted on historical building plans.

The Lot 30 Site Building was observed with eight service bays, which historically had (or currently have) seven underground hydraulic lifts and one hydraulic alignment rack. The former hydraulic lift system utilized approximately five underground hydraulic oil reservoirs, two air compressors with an associated air filter, and three floor-mounted control boxes. The current underground hydraulic lift system, including seven underground hydraulic lifts and one hydraulic alignment rack, was observed with five wall-mounted hydraulic fluid reservoirs/control boxes, three floor-mounted control boxes (where the control box between Bays 3 and 4 was presumably disconnected) and two electric air compressors. It was

presumed that the system was upgraded sometime around 2006; however, the status of the formerly used underground reservoirs is unknown.

Used vehicle storage was observed within the northeastern most storage area of the Lot 30 Site Building, as well as throughout the paved parking areas surrounding the Lot 30 Site Building. At the Residential Building, two metal doors were observed to be welded shut during site reconnaissance activities of the Residential Building, further barring access into a room where a suspect boiler was located.

One inactive fuel-oil fired boiler was observed within the Lot 30 Site Building as well. Ransom observed waste ash within the base of the boiler and potential asbestos containing materials (ACMs) along piping associated with the boiler.

The Lot 30 Site Building historically operated with two underground storage tanks (USTs), including: one 3,000-gallon fuel oil (No. 2) underground storage tank (UST) with an associated pump and appurtenant piping that connected to the fuel-oil fired boiler, which was located on the eastern side of the Lot 30 Site Building; and one 550-gallon waste oil UST located on the southeastern corner of the Lot 30 Site Building. Both USTs were installed sometime in or around 1974 and were related to the automotive repair shop and tire sales center activities. Permitting documentation reviewed at the City of Yonkers Housing and Building Department indicated that removal activities for two USTs were completed by September 1995; however, documents reviewed did not reference UST content or capacities. Based on known information, the USTs referenced within the permitting documentation are presumed to be the former 3,000-gallon fuel oil UST and former 550-gallon waste oil UST; however, detailed UST removal documentation was not identified by Ransom.

The 1898 Sanborn Map indicted one of the former residential properties on the Site with "Low Ground," indicating potential historic filling on-Site.

Ransom observed three 55-gallon steel drums containing waste oil within the service garage area of the Lot 30 Site Building, presumably generated during former automobile repair operations. The drums were observed to be in good condition with no visible staining on or around the drums; however, visible oil was observed on the drum lids. Additionally, evidence of six circular stains, indicative of former drum storage (presumably for waste oil), were observed between Bay 6 and Bay 7 within the Lot 30 Site Building. The concrete in the vicinity of the drums was observed with a large crack; however, no evidence of floor drains was observed in the vicinity of the staining.

Ransom observed Site-wide solid waste including, but not limited to, gasoline cans, paints cans, propane tanks, cleaning solvents, tires, 5-gallon buckets with cooking oil, etc. Additionally, a chest freezer and other former appliances, which may potentially contain ozone depleting substances (ODS), was observed as being stored on the exterior portion of the Residential property.

As part of our assessment of the Site, Ransom contracted Environmental Data Resources, Inc. (EDR) to perform an environmental database search. The Site was listed in the EDR environmental database report on the Resource Conservation and Recovery Act list of Conditionally Exempt Small Quantity Generators (RCRA-CESQ) database as the Goodyear Auto Service Center and was listed as a small quantity generator and handler of hazardous waste; however, no violations were identified in association with this database listing. Additionally, the Site was listed on the EDR database of Historical Auto Stations, which identifies potential automotive facilities based on operator names, as the Goodyear Auto Service Center for the years 1999, 2000, 2002, 2009, 2010, and 2012.

Additionally, gasoline service stations were identified in the EDR report with NY Spill cases on adjoining properties to the south of the Site. The environmental database provided by EDR revealed two active spill numbers (Spill No. 0608110 and Spill No. 0202712) and a spill number of unknown status (Spill No. 110501) related to the active Citgo-branded gasoline filling station located at 380 Riverdale Avenue, adjoining the Site to the south. This property was additionally identified as NY UST Facility ID No. 3-800744, an active facility with two 6,000-gallon gasoline USTs and one 6,000-gallon diesel UST. Based on the identified active spill numbers and close proximity to the Site, Ransom concludes that this facility has the potential to have impacted the Site.

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 for the Site, which consists of an approximate 1.02-acre parcel of land, identified by the City Assessor's Office as Block 129, Lots 26 and 30, and corresponds to 13 Culver Street and 372 Riverdale Avenue, City of Yonkers, Westchester County, New York. Any exceptions to, or deletions from, this practice are described in Section 1.2 of this report. Based on the information identified during this Phase I ESA, Ransom has identified the following RECs in connection with the Site.

- **REC 1 – Automotive Repair Drainage System**: A total of 11 sealed/inactive/former floor drains, four active floor drains, one former/inactive 4-inch cast iron drainage pipe, and one active 6-inch drainage pipe were either observed or identified throughout the Lot 30 Site Building. The former/inactive 4-inch cast iron drainage pipe was depicted as leading to a grease and sand interceptor. The Lot 30 Site Building's drainage system reportedly discharged and/or currently discharges to the municipal sanitary sewer system. The identified floor and appurtenant drainage pipes, and former grease and sand interceptor, represent RECs as follows (details are presented within Section 4.9.1 of this Report):
    - REC 1A – Service Garage Sealed Floor Drain;
    - REC 1B – Boiler Room Sealed Floor Drain;
    - REC 1C – Parts Room Sealed Floor Drain;
    - REC 1D – Bathroom Floor Drains;
    - REC 1E – Employee Locker Room Sealed Floor Drain;
    - REC 1F – Tire Wash Area Floor Drain;
    - REC 1G – Former Hydraulic Lift Floor Drains; and
    - REC 1H – Former Grease and Sand Interceptor.

  Due to the close proximity of the sealed/inactive/former floor drains and former underground grease and sand interceptor to the former automobile repair activities, there is a potential for soil and/or groundwater impacts within this area. Further investigation is warranted.

- **REC 2 – Automotive Repair Hydraulic Lift Systems**: A total of seven of the eight automobile repair bays housed underground hydraulic lifts, and one bay housed an air/hydraulic alignment rack. It is believed that at least five of the seven hydraulic lifts historically had underground hydraulic oil reservoirs, which were upgraded to wall-mounted hydraulic underground lifts. Two former air compressors and associated air filter were located within the storage area of the Lot 30 Site Building and were connected (via underground piping) to the three floor-mounted control boxes for the former hydraulic lift operations. The identified current and former system components represent RECs as follows (details are presented within Section 4.4 of this Report):

- REC 2A – Hydraulic Lifts and Alignment Rack;
- REC 2B – Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes;
- REC 2C – Former Hydraulic Lifts, Air/Hydraulic Alignment Rack and Underground Hydraulic Oil Reservoirs;
- REC 2D – Hydraulic Lift Control Boxes; and
- REC 2E – Former Air Compressors.

Based on the former operations and unknown condition of the subsurface in the vicinity of the current/former hydraulic lifts/alignment rack, wall-mounted hydraulic fluid reservoirs, underground hydraulic oil reservoirs, hydraulic lift control boxes, and former air compressors, there is a potential for soil impacts within these areas. Further investigation is warranted

- **REC 3 – Vehicle Storage**: Used vehicle storage was observed within the northeastern most storage area of the Lot 30 Site Building, as well as throughout the paved parking areas surrounding the Lot 30 Site Building. The areas beneath the parked vehicle was inaccessible during Site reconnaissance activities; therefore, Ransom was unable to ascertain the integrity of the surface materials in these areas. Further investigation is warranted in all vehicle storage areas throughout the Site.

- **REC 4 – Inactive Oil-Fired Boiler System**: One inactive oil-fired burner was observed in the boiler room of the Lot 30 Site Building. The oil-fired burner was observed to be in poor condition with heavy rusting and staining visible on the exterior of the boiler. Due to the presence of dust and dim lighting, the condition of the floor below the boiler could not be fully assessed. Additionally, waste ash, which may contain heavy metals, was observed within the base of the boiler. Due to the poor condition of the oil-fired burner, close proximity to a former floor drain, inability to access the area beneath the oil-fired burner, and presence of waste ash, there is a potential for residual soil impacts in this area. Further investigation into the soil conditions in this area is warranted.

- **REC 5 – Former 3,000-gallon Fuel Oil UST**: One former 3,000-gallon fuel oil UST was identified on historic construction plans on the eastern exterior side of the Lot 30 Site Building. An associated pump was identified on the eastern most portion of the storage area within the Lot 30 Site Building as well. The fuel oil UST depicted on the historical plan was connected to a pump and subsequently to the oil-fired boiler (REC 4) via underground piping. A certificate of completion was issued by the City of Yonkers Bureau of Housing and Buildings on September 19, 1995 for "removed underground oil tanks," presumably indicating the removal of the 3,000-gallon fuel oil UST. However, due to the vague nature of the certificate of completion and lack of additional documentation for the closure activities, further investigation is warranted regarding this REC.

- **REC 6 – Former 550-gallon Waste Oil UST**: One former 550-gallon waste oil UST was identified on historic construction plans on the southeastern exterior or of the Lot 30 Site Building. A certificate of completion was issued by the City of Yonkers Bureau of Housing and Buildings on September 19, 1995 for "removed underground oil tanks," presumably indicating the removal of the 550-gallon waste oil UST. However, due to the vague nature of the certificate of completion and lack of additional documentation for the closure activities, further investigation is warranted regarding this REC.

- **REC 7 – 55-Gallon Waste Oil Drum Storage**: Approximately six circular stains, indicative of former drum storage (presumably for waste oil), were observed between Bay 6 and Bay 7 within the Lot 30 Site Building. The concrete in the vicinity of the drums was observed with a large crack; however, no evidence of floor drains was observed in the vicinity of the staining. The presence of this staining represents evidence of historical drum storage and waste generation, which presumably was how waste oil was stored after the waste oil UST was removed in 1995 until 2015, when automobile repair operations ceased. Due to the observed crack in the concrete and the evidence of staining in this area, further investigation of the soil conditions in this area is warranted.

  Additionally, Ransom observed three 55-gallon steel drums containing waste oil within the service garage area of the Lot 30 Site Building, presumably generated by former automobile repair operations. The drums were observed to be in good condition with no visible staining on or around the drums; however, visible oil was observed on the drum lids. No further investigation is recommended in connection with the existing 55-gallon waste oil drums; however, proper removal and off-site disposal is required prior to Site redevelopment.

- **REC 8 – Current/Former Residential Use**: Ransom identified one current and eight former residential buildings associated with the Site. The existing Residential Building is known to use fuel oil for heating. The historical heating source(s) for the former residential structures are unknown. Lastly, private septic systems are also associated with residential use. Therefore, there is a potential for one or more heating oil (No. 2) USTs and/or one or more septic systems to be present on-Site as follows:

  - **REC 8A – Known Fuel Oil Use at the Residential Building**: Property records were identified by Ransom for the Residential Building located on the Lot 26 portion of the Site, which indicated the usage of fuel oil at this property. Ransom was unable to confirm the presence of a fuel oil tank or boiler at the Residential Building; however, a sealed fill pipe was observed on the eastern side of the structure, along the foundation of the Lot 30 Site Building, indicating the potential presence of a fuel oil AST in the basement. Further, two metal doors were observed to be welded shut during site reconnaissance activities of the Residential Building, barring access into a room where a suspect boiler was located.

  - **REC 8B –Former Residential Use**: Historic records and construction plans identified the presence of eight residential structures (not including the current Residential Building) at the Site prior to redevelopment activities in 1974 and 1980. Specific documentation regarding these structures was not identified by, or provide to, Ransom.

  Due to the potential for historic fuel oil usage on the Lot 26 portion of the Site and based on the absence of a known heating source, UST, and/or septic system information for the former residential houses, further investigation is warranted regarding this REC.

- **REC 9 – Potential Fill**: The 1898 Sanborn Map indicted one of the former residential properties with "Low Ground," which indicates that the property had a potential to have been historically filled. The location of this "Low Ground" indication is mostly beneath the present-day Lot 30 Site Building. Based on the unknown source and characteristics of this potential fill material, Ransom believes that the potential exists for off-site fill material to have been brought on-Site; therefore, Ransom recommends that a subsurface investigation be conducted to assess whether historical fill is present on-Site and if it has impacted the environmental conditions at the Site.

- **REC 10 – Potential Off-site Sources**: Ransom identified two current off-site uses where known or potential past discharges of hazardous chemicals from facilities, including a gasoline filling station and an automotive repair facility, have or may have occurred upgradient of the Site and one off-site use where potential past discharges of hazardous chemicals from facilities, including a former gasoline filling may have occurred sidegradient of the Site. The following potential off-site sources were identified in close proximity to the Site, and represent RECs.

    - **REC 10A – Off-Site Citgo Service Station**: The southerly adjacent Citgo-gasoline filling station was identified as an active service station with multiple active NY Spills incident numbers associated with this property.

    - **REC 10B – Off-Site Devonshire Discount Tire, Auto Body & Repair Center**: A property located approximately 390 feet to the south of the Site was identified as an active auto body and repair center that has a NY Spills incident with a "Closed" status.

    - **REC 10C – Former Riverdale Auto Service Inc.**: The property located 377 Riverdale Avenue, located adjacent (across Riverdale Avenue) to the west and sidegradient of the Site, was identified as a potential off-Site source due to its use as a former gasoline service station from at least 1940 through at least 1978; however, no further information was identified.

  Due to the close proximity, NY Spill incident(s) and/or former/current use, Ransom recognizes the potential for off-Site impact to the Site from the current filling station, active auto body and repair center, and former off-site service station operations; therefore, further investigation is warranted.

In addition to the RECs identified above, Ransom identified the following condition of potential environmental concern, which is being documented as a *de minimis* condition as follows:

- **Site-Wide Solid Waste**: Ransom observed Site-wide solid waste including, but not limited to, gasoline cans, paints cans, propane tanks, cleaning solvents, tires, 5-gallon buckets with cooking oil, etc. Additionally, a chest freezer and other former appliances, which may potentially contain ozone depleting substances (ODS), was observed as being stored on the exterior portion of the Residential property.

Some additional environmental concerns were identified which are considered non-scope under ASTM, but were recognized as areas of potential business environmental risk. Specifically, based on the construction date of the Lot 30 Site Building (1974) and the Residential Building (pre-1897), hazardous building materials may be present in the Site Buildings, including asbestos-containing materials (ACM), polychlorinated biphenyls (PCBs) in fluorescent light ballasts, lead-based paint (LBP), and mercury-containing fluorescent lights and/or other equipment. Prior to demolition of the current Site Buildings, identified hazardous building materials should be removed and disposed of in accordance with local, state, and federal regulations.

Based on the findings and conclusions presented above, Ransom makes the following recommendations:

- Based upon the construction date of the Site Building (1974) and Residential Building (pre-1897), hazardous building materials may be present within the Site buildings. Ransom recommends the performance of a comprehensive Hazardous Material Inventory (HMI) survey prior to demolition of the Site Buildings.

- Ransom recommends that sub-slab soil samples be collected along the drainage pipes and on-Site sanitary sewer lines associated with the automotive repair floor drains (REC 1). In an effort to target potential heavily impacted areas, video inspection of the pipes for evidence of cracks or breaches could be conducted as part of the geophysical survey recommended below. Based on the findings of the video inspection, soil sampling could be biased towards those areas of pipe cracks/breaches.

- Ransom recommends the completion of a geophysical survey across the Site in an effort to: (1) confirm the removal of the 3,000-gallon fuel oil UST (REC 5) and 550-gallon waste oil UST (REC 6) presumably removed from the Site in 1995, and (2) assess if one or more historic USTs, former product piping, and/or septic tanks are present from the current/former residential use (REC 8). If anomalies are identified, further subsurface investigation may be warranted.

- A subsurface soil and groundwater investigation is recommended prior to the initiation of construction activities. Ransom recommends the following soil and groundwater monitoring program be completed prior to redevelopment activities:

    - Ransom recommends the collection of sub-slab soil and groundwater samples from beneath the current/former hydraulic lifts and one hydraulic alignment rack (RECs 2A and REC 2C) within the Lot 30 Site Building.

    - Ransom recommends the collection of sub-slab soil samples from beneath the five identified wall-mounted hydraulic fluid reservoirs (REC 2B) within the Lot 30 Site Building immediately adjacent to the exposed subsurface piping.

    - Ransom recommends the collection of sub-slab soil samples immediately adjacent to the three floor-mounted control boxes (REC 2D) within the Lot 30 Site Building.

    - Ransom recommends the collection of subsurface soil and groundwater samples in the locations of the former 3,000-gallon fuel oil UST (REC 5) and 550-gallon waste oil UST (REC 6).

    - Ransom recommends the collection of subsurface soil samples at the location of the crack observed near the former waste oil drum storage/staining (REC 7).

    - Ransom recommends the collection of subsurface soil samples at the location of the potential historical fill area (REC 9).

    - Ransom recommends the installation of temporary groundwater monitoring points and/or soil borings along the southern boundary of the Site to evaluate potential off-Site impacts to the Site (REC 10).

- Since there were physical obstructions (e.g., stored vehicles, dirt, welded doors, etc.), which represent a significant data gap, and based on historical operations, Ransom recommends the physical obstructions be removed and further inspection completed of the ground surface areas beneath the former air compressor (REC 2E), the stored vehicles (REC 3), the inactive oil-fired burner (REC 4) and potential residential fuel-oil fired boiler (REC 8). Further investigation activities may be warranted based on the findings.

- Ransom recommends the proper disposal of the fuel oil-fired burner and its contents (e.g., waste ash) (REC 8) identified within the Lot 30 Site Building. After removal, Ransom recommends further inspection of the surface areas beneath the fuel oil-fired burner. Further investigation activities may be warranted based on the findings.

- 55-Gallon drums present on-Site should be removed from the Site and properly disposed of prior to Site construction activities, and documentation of their disposal should be maintained with a copy provided to CVS.

- On-Site drainage structures, including potential septic system components and/or storm water drainage structures (catch basins, etc.), that will not be reused as part of the Site redevelopment should be properly decommissioned according to local, state, and federal requirements. If evidence of contamination is identified during decommissioning of these structures, Ransom should be contacted to evaluate whether additional investigation or cleanup is warranted.

- Ransom recommends that miscellaneous chemicals, hazardous materials and/or stored appliances observed at the Site should be recovered/removed from the Site and properly disposed/recycled (by a certified technician where applicable) prior to proposed redevelopment activities.

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## 1.0 INTRODUCTION

The following report presents the findings of a Phase I Environmental Site Assessment (ESA) performed by Ransom Consulting, Inc. (Ransom) for the adjoined properties located at 13 Culver Street and 372 Riverdale Avenue in the City of Yonkers, Westchester County, New York (i.e., the Site), which includes Section 1, Block 129, Lots 26 and 30. A Site Location Map and Site Plan are included as Figures 1 and 2, respectively.

### 1.1 Purpose and Scope of Work

The purpose of this Phase I ESA was to document the environmental history of the Site, to evaluate the likelihood that a release of hazardous substances or petroleum products (HSP) has occurred or has the potential to impact the Site, and to provide our professional opinion regarding evidence of recognized environmental conditions (RECs) in connection with the Site. The term recognized environmental conditions means:

> *The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.*

The term REC also includes controlled RECs (CRECs) and historical RECs (HRECs), as defined below:

> The term CRECs means:
>
> *A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.*
>
> The term HRECs means:
>
> *A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.*

This Phase I ESA was performed in accordance with the requirements of the ASTM International E 1527-13. This project was also conducted in accordance with the Ransom's Corporate Services Agreement with CVS Pharmacy, Inc. (CVS) dated April 1, 2015 (the "Corporate Services Agreement"). The general purpose of this Phase I ESA was to evaluate the environmental condition of the Site for evidence of RECs in connection with the Site.

The scope of work for this Phase I ESA included the completion of the following tasks:

1. Review of municipal records and a search of state and federal environmental databases to identify sites of potential environmental concern for the Site and vicinity.

2. Review of reasonably ascertainable historical land use records for the Site and adjoining properties.

3. A site reconnaissance to observe current conditions.

4. Interviews with persons knowledgeable about the Site.

1.2 Limitations

This Phase I ESA was prepared exclusively for the use of T.M. Crowley & Associates, Inc. (TMC) and CVS Pharmacy, Inc., its parent, affiliates and subsidiaries and their successors, assigns, and grantees, collectively "the Users," and in accordance with the Corporate Services Agreement.

Along with the limitations set forth in various sections of the ASTM International E 1527-13 protocol, the accuracy and completeness of this report is limited by the following:

1. Access Limitations: Access limitations were encountered during site reconnaissance activities. Access to the Residential Building was limited to the eastern portion of the basement, as access to the upper floors was restricted due to safety concerns.

2. Physical Obstructions to Observations: The paved parking areas in the vicinity of the Lot 30 Site Building was observed with numerous parked vehicles; therefore, much of the paved areas surrounding the Lot 30 Site Building could not be observed. Additionally, three vehicles were parked over the hydraulic lifts within the service garage of the Lot 30 Site Building, specifically in Bay 2, Bay3, and Bay 6; therefore, these areas could not be observed. Numerous vehicles were also parked throughout the existing storage area in the northeastern most portion of the Lot 30 Site Building; therefore, concrete slab/floor conditions could not be observed. Additionally, two metal doors were observed to be welded shut during site reconnaissance activities of the Residential Building, further barring access to this building. Lastly, the area around the inactive fuel-oil fired boiler was cover in dirt and located in a dimly lit room; thereof conditions of the concrete surface could not be fully assessed.

3. Outstanding Information Requests:

   The United States Army Corps of Engineers (USACE) have not provided information in response to Ransom's information requests regarding wetlands permits and violations. On May 9, 2017, the USACE responded and stated that files were available for review, and that a file search was underway. At the time this report was prepared; however, Ransom was awaiting further response regarding the duplication of the files. Upon receipt and review, pertinent information will be provided in an addendum to this report.

   The City of Yonkers Fire Department have not provided information in response to Ransom's information requests regarding incident records. On May 11, 2017, the City of Yonkers Fire Department was contacted by Ransom and the request was re-initiated. At the time this report was prepared; however, Ransom was awaiting further response regarding the duplication of files. Upon receipt and review, pertinent information will be provided in an addendum to this report.

Freedom of Information Law requests were submitted to the New York State Department of Environmental Conservation (NYSDEC) regarding spill incidents for the Citgo service station located at 380 Riverdale Avenue, Yonkers NY on May 12, 2017. At the time this report was prepared, Ransom had not received a response from the NYSDEC. Upon receipt and review, pertinent information will be provided in an addendum to this report.

4. Historical Data Source Failure: The Site's first developed use could not be determined. Topographic maps, aerial photographs, and Sanborn maps suggest that the Site was developed as residential properties as early as 1897; however, prior use cannot be confirmed. This represents historical data source failure according to ASTM E 1527-13; however, based on the known prior use of the Site for residential purposes, this data source failure does not represent a significant concern warranting additional investigation.

5. Significant Assumptions: Based on Ransom's Site observations and review of United States Geological Survey (USGS) maps, Ransom assumes groundwater follows topographic gradient and flows to the north/northwest toward the Hudson River, located approximately 0.46-miles to the west of the Site. Also, based on known information, the USTs referenced within the City's permitting documentation indicated that removal activities for two USTs were completed by September 1995; however, documents reviewed did not reference UST contents or capacities; Ransom assumed this documentation to be the removal of one 3,000-gallon fuel oil UST and one 550-gallon waste oil UST; however, detailed UST removal documentation was not identified by Ransom.

6. Exceptions: None.

7. Deviations: Per the Corporate Services Agreement with CVS, Ransom performed a limited visual assessment and/or research related to suspect asbestos, lead-based paint, polychlorinated biphenyl (PCB) containing equipment, mercury-containing fluorescent lamps and other equipment, radon, and wetlands.

8. Other: None.

### 1.3 User Provided Information

An ASTM User Questionnaire was completed by Ms. Kristen Walker of TMC on April 28, 2017. On May 9, 2017 Ransom also interviewed Mr. Daniel Romano, the property owner. A copy of the User Questionnaire is included in Appendix H, as Supplemental Documentation.

#### 1.3.1 Title Records

Title records in connection with the Site were provided by the Office of the Westchester County Clerk Online Records Review system available at https://wro.westchesterclerk.com. No environmental liens or activity/use restrictions regarding the Site were included within the property deeds. A review of the available title records is summarized in Section 3.2 of this report.

#### 1.3.2 Environmental Liens or Activity and Use Limitations

No activity and use limitations (AULs) were identified by the User for the Site, nor were AULs identified in the current property deeds.

### 1.3.3 Specialized Knowledge

No specialized knowledge in connection with the Site or facility operations was provided by the User.

### 1.3.4 Commonly Known or Reasonably Ascertainable Information

No commonly known or reasonably ascertainable information about the Site that is material to RECs in connection with the Site was provided by the User.

### 1.3.5 Valuation Reduction for Environmental Issues

The User did not identify a reduction in the purchase price of the Site, compared to the fair market value.

### 1.3.6 Owner, Property Manager, and Occupant Information

No information pertinent to RECs in connection with the Site was provided by the owners, property managers, or occupants with the exception of that information presented in the remainder of this document.

### 1.3.7 Reason for Performing Phase I ESA

This Phase I ESA was performed as part of environmental due diligence to support a property transaction involving the Site.

### 1.3.8 Previous Environmental Reports

At the time this report was prepared, no knowledge or documentation regarding previous environmental investigations, assessments, and/or remedial activities performed at the Site were identified by Ransom.

## 2.0 PROJECT LOCATION/DESCRIPTION

### 2.1 Site Location and Description

The Site is located at the northeast corner of the intersection of Culver Street and Riverdale Avenue in the City of Yonkers, Westchester County, New York. For the purpose of this Phase I ESA, the Site consists of two parcels of land encompassing a total of approximately 1.02-acres and is identified by the City of Yonkers Assessor's Office as 13 Culver Street and 372 Riverdale Avenue, Section 1, Block 129, Lots 26 and 30, respectively.

The Lot 26 portion of the Site is currently developed with a two and a half-story, 1,320-square foot Residential Building with a full basement, constructed sometime prior to 1897. The Lot 30 portion of the Site is currently developed with one 8,695-square foot commercial structure, constructed sometime in 1974, which is currently occupied by West Coast Autos Sales, an automotive sales company. The Lot 30 Site Building previously operated as a Goodyear branded automotive repair shop and tire sales center from 1974 until 2015. The Lot 30 Site Building consists of eight automotive garage bays within the service garage, two restrooms, a former employee locker room, boiler room, storage areas, two offices, and showroom. The remainder of the property consists of concrete walkways and asphalt paved parking surfaces, with an area of limited landscaping consisting of several trees and bushes between the Lot 26 and Lot 30 portions of the Site.

The Site is located in a mixed commercial and residential area of the City of Yonkers. Properties to the north of the Site are primarily residential. Properties to the south of the Site, across Culver Street, are primarily residential, with the exception of a Citgo-branded gasoline filling station. Further south of the Citgo-branded gasoline filling station is the Devonshire Discount Tire, Auto Body & Repair Center. The PEARLS Hawthorne Elementary School is located to the west of the Site, across Riverdale Avenue. The property to the east of the Site is a City of Yonkers operated park, known as Culver Park.

The Site is located on the City of Yonkers, New York, U.S. Geological Survey (USGS) 7.5-minute series Quadrangle and is located at the approximate Universal Transverse Mercator (UTM) coordinates of 4,530,414 meters north and 592,563 meters east. The latitude and longitude of the Site are 40° 55' 10.5636" and -73° 54' 1.908", respectively. A Site Location Map is provided as Figure 1 (Appendix A). A Site Plan and photograph log are included as Appendices B and D, respectively.

### 2.2 Site Utilities

Based on information provided by Mr. Daniel Romano, the property owner, the Lot 30 Site Building is currently connected to water and sanitary sewer service provided by the City of Yonkers. Historical Site plans indicate that the Lot 30 Site Building has bene connected to the municipal water and sanitary sewer system since the building was erected, sometime in 1974. A total of 15 current, closed, or former floor drains were observed within the Lot 30 Site Building, which reportedly discharge to the sanitary sewer system. Electric and natural gas (for heat) service to the Lot 30 Site Building is provided by the Consolidated Edison Company of NY, Inc. (ConEdison), where a roof-mounted heating, ventilation, and air conditioning (HVAC) system was utilized. Solid waste removal is the responsibility of the tenant. Overhead heaters were observed during site reconnaissance activities within the service garage of the Lot 30 Site Building. Based on records provided by the City of Yonkers Building and Housing Department, one 3,000-gallon fuel oil UST was removed from the eastern side of the Lot 30 Site Building in sometime in or around August 1995, indicating the use of the oil-fired burner and fuel oil prior to this time.

Additionally, according to Mr. Daniel Romano, all utility services to the Residential Building has been discontinued. Records identified through the City of Yonkers City Clerk's Office indicate that the fuel oil was historically utilized at the Residential Building. No additional information regarding utilities at the Residential Building was identified by Ransom, including the presence or absence of a septic system.

## 2.3 Environmental Setting

### 2.3.1 Topography

Based on field observations, topography at the Site generally slopes downward to the north-northwest. According to the Yonkers, New York-New Jersey, 7.5-Minute USGS Quadrangle, dated 2013, the topography in the immediate vicinity of the Site declines to the north-northwest; however, the topography in the greater area of the Site declines to the west, toward the Hudson River, located approximately 0.46-miles to the west of the Site. The elevation of the Site is approximately 50-feet above mean sea level on the North American Vertical Datum (NAVD) of 1988.

### 2.3.2 Soils/Geology

Based on a review of the U.S. Department of Agriculture's (USDA) Web Soil Survey, the Site is underlain by Urban land-Woodbridge complex soils, with 3 to 8 percent slopes (UwB). Urban land soils consist of natural and disturbed soil material overlain by man-made structures, including buildings and asphalt. Woodbridge soils consist of fine sandy loams from 0 to 7-inches below grade, fine sandy loams from 7 to 30-inches below grade, and gravelly fine sandy loams from 30 to 65-inches below grade. Woodbridge soils are derived from coarse-loamy lodgment till derived from gneiss, granite, and/or schist.

### 2.3.3 Hydrogeology

Based on Ransom's observations of Site topography, groundwater at the Site is anticipated to generally flow to the north-northwest, toward the Hudson River. The Hudson River is located approximately 0.46 miles to the west of the Site.

### 2.3.4 Surface Water Bodies

Surface water bodies were not observed at or adjacent to the Site. The nearest body of water is the Hudson River located approximately 0.46-miles to the west of the Site.

### 2.3.5 Wetlands

According to the U.S. Fish and Wildlife Service National Wetlands Inventory website and delineated wetlands are not located at the Site or adjacent properties.

On May 8, 2017, Ransom submitted a Freedom of Information Act (FOIA) request to the United States Army Corps of Engineers (USACE) regarding wetlands or wetlands violates at the Site. On May 9, 2017, the USACE responded and stated that files were available for review, and that a file search was underway. At the time this report was prepared, however, Ransom was awaiting further response regarding transmittal of the files. Upon receipt and review, pertinent information will be provided in an addendum to this report.

### 2.3.6 Flood Plains

The Site is located on the Federal Emergency Management Agency (FEMA) Flood Insurance Map (Parcel 36119C0317F). Based on the FEMA map, the Site is not located within a designated Flood Zone.

### 2.3.7 Potential for Radon Gas

According to the EDR Report, the U.S. Environmental Protection Agency (U.S. EPA) Radon Zone Classification for Westchester County, NY is 3, which is defined by U.S.EPA as an indoor average level less than 2 picoCuries/Liter (pCi/L). The average radon concentrations of the 650 sites tested in the same zip code as the Site were 1.730 pCi/L for basement areas and 0.930 pCi/L for living areas, which are below the U.S. EPA residential action level of 4.0 pCi/L. Based on the radon concentration information provided in the EDR Report and the proposed slab on grade construction and commercial use of the Site, radon abatement activities should not be necessary. A copy of the EDR report is provided in Appendix E.

## 3.0 HISTORICAL/RECORDS REVIEW

### 3.1 Summary

Ransom determined the Site history based on an interview with the property owner, historical topographic maps, historical aerial photographs, historical Sanborn maps, and historical city directories.

The Site was developed as multiple separate residential properties as early as 1897. The Site originally was comprised of nine separate lots with ten residential structures, identified on historical maps as 366, 370, 372, 374, 376 and 378 Riverdale Avenue and 15, 17, 21, and 21R Culver Street. Historically, the Residential Building located on the Site has been identified as both 13 Culver Street and 15 Culver Street. By as early as 1973, the residential structures previously located at 17, 21, and 21R Culver Street, and 372, 374, 376, and 378 had been cleared from the Site. Construction of the Lot 30 Site Building was completed by as early as May 1974, at which time the Goodyear Tire & Rubber Co. took up occupancy. Commercial improvements to the Lot 30 portion of the Site were completed in June of 1980, at which time two remaining residential structures, located to the north of the Lot 30 Site Building, were removed from the Site and a paved parking area was installed. The Residential Building located at 13 Culver Street is the only remaining residential structure on-Site. The Goodyear Tire & Rubber Co. operated as an automotive repair and tire sales center from 1974 until 2015. The West Coast Custom Auto Sales company, an automotive sales company, took up occupancy of the Lot 30 Site Building sometime June 2016 and is the current occupant.

Occupancy of the Residential Building has been strictly residential from as early as 1897 through sometime in 2009, at which time the Residential Building was vacated, as it remains currently. The northern portion of the Lot 26 portion of the Site is currently utilized for vehicle storage by a neighboring property owner, no further information was identified regarding current property usage of the Residential Building and surrounding property.

### 3.2 Title Records

The Site is identified on the City of Yonkers Assessor's Tax Map Section 1, Block 129, Lots 26 and 30. The following property ownership records were identified from information provided through the Office of the Westchester County Clerk – Westchester Records Online portal https://wro.westchesterclerk.com:

| **13 Culver Street, Yonkers NY** | | | | |
|---|---|---|---|---|
| **Parcel** | **Address** | **Grantor** | **Grantee** | **Date** |
| Block: 151, Lot 8 | 401 Riverdale Avenue, Yonkers NY | New York State Department of Transportation – Real Property Division | Newross Realty Corp. c/o Jack Toal, Andrew Sunull, Lilly McNeil, and Joseph Bera | September 17, 1980 |
| Block: 129, Lot 26 | 15 Culver Street, Yonkers NY | Floyd Freeman, as Administrator of the Estate of Lillie Mae McNeil | Floyd Freeman | January 19, 1995 |
| Block: 129, Lot 26 | 15 Culver Street, Yonkers NY | Floyd Freeman | Floyd Freeman and Lucy Freeman | January 19, 1995 |
| Block: 129, Lot: 26 | 15 Culver Street, Yonkers NY | Lucy Ruth Freeman, as Executor of the | Lucy Ruth Freeman | April 12, 2004 |

| | | | | |
|---|---|---|---|---|
| | | Estate of Floyd Freeman | | |
| Block: 129, Lot 26 | 15 Culver Street, Yonkers NY | Freeman, Lucy R | 15 Culver St Realty Corp | December 24, 2014 |
| Block: 129, Lot: 26 | 15 Culver Street, Yonkers NY | 15 Culver Street Realty Corp. | Dutchman Realty LLC | February 3, 2017 |

| **372 Riverdale Avenue, Yonkers NY** | | | | |
|---|---|---|---|---|
| **Parcel** | **Address** | **Grantor** | **Grantee** | **Date** |
| Block: 129, Lot: 37, 38, and 39 | 366 Riverdale Avenue, Yonkers, NY | Joseph Meechan and Elizabeth K. Meechan | Luma Realty Inc. | July 31, 1969 |
| Block: 129, Lot: 32 | 378 Riverdale Avenue, Yonkers, NY | Georgianna Mann | Luma Realty Inc. | September 10, 1970 |
| Block: 129, Lot: 33 | 376 Riverdale Avenue, Yonkers, NY | Rachel Coleman | Luma Realty Inc. | June 19, 1971 |
| Block: 129, Lot: 34 | 374 Riverdale Avenue, Yonkers, NY | Max Fabel and Pauline Fabel | Luma Realty Inc. | October 1, 1972 |
| Block: 129, Lot: 36 | 370 Riverdale Avenue, Yonkers, NY | Laurette Walsh | Luma Realty Inc. | December 22, 1972 |
| Block: 129, Lot: 30 | 372-8 Riverdale Avenue, Yonkers, NY | Luma Realty, Inc. | Mary Louise Romano | December 28, 1988 |
| Block: 129, Lot: 30 | 372-8 Riverdale Avenue, Yonkers, NY | Mary Louise Romano | Mary Louise Romano and John N. Romano | June 1, 2000 |
| Block: 129, Lot: 30 | 372 Riverdale Avenue, Yonkers NY | John N. Romano | Mary Louise Romano | November 1, 2003 |
| Block: 129, Lot: 30 | 372 Riverdale Avenue, Yonkers NY | Mary L. Romano | Mary Louise Romano Irrevocable Income Only Trust Fund / Andrew Romano | February 14, 2012 |
| Block: 129, Lot: 30 | 372 Riverdale Avenue, Yonkers NY | Mary L. Romano Irrevocable Income Only Trust Fund | Andrew M. Romano and Daniel P. Romano | May 28, 2013 |

### 3.3 Prior Use Interviews

Ransom interviewed Mr. Daniel Romano, the property owner, on May 9, 2017 regarding prior Site use. Mr. Romano informed Ransom that the Goodyear Tire & Rubber Co. operated as an automotive repair facility and tire sales center from 1974, at which time the Lot 30 Site Building was constructed, through sometime in 2015. Mr. Romano indicated that the Lot 30 Site Building was currently occupied by a used car dealership identified as the West Coast Custom Auto Sales company. Mr. Romano indicated that a heating oil tank was utilized for the Lot 30 Site Building, but was unaware of removal activities. Mr. Romano informed Ransom that the Residential Building had been vacant since sometime in 2009, and was heated by natural gas provided by ConEdison. Mr. Romano also indicated that the northern portion of the Lot 26 portion of the Site was currently being utilized as a vehicle storage area by a neighboring property owner; however, further information was not provided.

## 3.4 Local, State, and Federal Government Agency Record Review

### 3.4.1 City of Yonkers Assessor's Office

Information provided by the City of Yonkers Assessor's Office included current property cards and tax maps for the Site properties. Copies of the property cards and tax maps are included in Appendix H. Information provided by the Assessor's Office regarding the Site history coincided with information discussed in Section 3.1 of this report. Information pertaining to potential underground or aboveground storage tanks, hazardous waste storage, and/or adverse environmental conditions at the properties was not provided on the property cards. No additional information was provided by the City of Yonkers Assessor's Office.

### 3.4.2 City of Yonkers Building and Housing Department

Information provided by the City of Yonkers Building and Housing Department included various building permits for alterations and improvements of the Site Buildings. On May 9, 2017, Ransom reviewed available files provided by the City of Yonkers, which included the following pertinent permitting/inspection documents reviewed for the Lot 30 Site Building/property located at 372 Riverdale Avenue:

- Construction Plan: Proposed construction plans dated sometime in 1973 detailed the proposed Lot 30 Site Building engineering plans. Specifically, the plans indicated that a 550-gallon waste oil UST was to be installed on the southeast exterior corner of the Lot 30 Site Building. This waste oil UST was associated with historic automotive repair activities at the Site. This construction plan additionally illustrated that location for the 3,000-gallon fuel oil UST on the eastern exterior of the Lot 30 Site Building with an associated pump and appurtenant piping that connected to fuel-oil fired boiler inside the eastern portion of the Lot 30 Site Building. The plans also indicated seven hydraulic lifts and one hydraulic alignment rack were to be installed with the service bays of the Lot 30 Site Building with associated control boxes. The plans detailed a cross-section of the proposed underground lift housing and hydraulic oil reservoirs plans. They also depicted a floor drainage plan, where on-Site floor and roof drain (where roof venting operations were detailed) drain to the sanitary sewer system.

- Certificate of Occupancy: A Certificate of Occupancy dated June 12, 1973 listed Luma Realty as the property owner for the Lot 30 portion of the Site and the Goodyear Tire & Rubber Co. as the tenant.

- Construction Plan: Construction plans dated October 12, 1979 detail plans to demolish the remaining residential structures on the northwest portion of the Site.

- Permit Application: A permit application was submitted on July 7, 1980 for the construction of an open air paved parking area in the vicinity of the Lot 30 Site Building, in the location of the former residential structures on-Site.

- Permit Application: A permit application was submitted on June 26, 1995 by Mr. John Romano requesting permission for the removal of underground storage tanks.

- Certificate of Completion: A certificate of completion was issued on August 14, 1995 to Ms. Mary Romano for the removal of underground oil tanks for the property located at 372 Riverdale Avenue, Yonkers NY.

- Permit Application: A permit application was submitted on June 16, 2016 by Mr. Andrew Romano to complete Site improvement activities to the Lot 30 Site Building. The application was listed as denied by the City of Yonkers Building and Housing Department.

- Permit Application: A permit application was submitted on April 7, 2017 to complete improvement activities to the Lot 30 Site Building, which was subsequently denied by the City of Yonkers Housing and Building Department. Plans included within this application indicated that a flue pipe connected to the hot water heater was not properly vented and was venting carbon monoxide to the interior of the Lot 30 Site Building. Plans also indicated that the overhead gas radiant heaters within the service garage were damaged.

The following pertinent permitting/inspection documents reviewed for the Residential Building/property located at 13 Culver Street were identified:

- Permit Application: A permit application was submitted on July 10, 1956 to complete improvements/alterations to the basement of the Residential Building.

- Permit Amendment: A permit amendment was submitted on September 10, 1957 for alterations/additions to the porch of the Residential Building.

- Permit Approval: A permit approval dated September 18, 1958 granted additions and alterations to the Residential Building to the property owner, Mr. William McNeill.

- Permit Application: A permit application dated sometime in 1975 was submitted for the addition of two restrooms to the first floor of the Residential building.

Copies of the permitting documentation reviewed above are included in Appendix H, as Supplemental Documentation.

Information provided by the Building Department regarding Site history coincided with information discussed in Section 3.1 of this report. The files reviewed at the Building Department did not include information pertaining to adverse environmental conditions at the Site.

### 3.4.3 City of Yonkers Fire Department

A request for information was submitted to The City of Yonkers Fire Department on May 1, 2017; however, at the time this report was prepared, Ransom was awaiting further response regarding the request. Upon receipt and review, pertinent information will be provided in an addendum to this report.

### 3.4.4 City of Yonkers Public Works Department

No pertinent information regarding current and/or former water use or sewage disposal was provided by the City of Yonkers Public Works Department.

### 3.4.5 Westchester County Department of Health

A request for information was submitted to the Westchester County Department of Health of May 1, 2017. On May 10, 2017, the Westchester County DOH responded that Ransom's request for information had been received and that documents will be received by June 9, 2017. On June 7, 2017, a verbal response was received from Ms. Caren Halbfinger, the Public Affairs Director, of the Westchester County Department of Health that no records were available for review for the Site and documentation confirming this will be received by June 9, 2017.

### 3.4.6 New York State Department of Environmental Conservation

Freedom of Information Law requests were submitted to the NYSDEC regarding spill incidents for the Citgo service station located at 380 Riverdale Avenue, Yonkers NY on May 12, 2017. At the time this report was prepared, Ransom had not received a response from the NYSDEC. Upon receipt and review, pertinent information will be provided in an addendum to this report.

## 3.5 Historical Maps

Sanborn Maps

Sanborn Fire Insurance Maps dated 1898, 1917, 1942, 1951, 1956, 1957, 1971, 1973, 1978, 1989, 1991, and 2004 were provided by EDR. The following is a description of the Site and the surrounding properties. The Certified Sanborn Map Report is included in Appendix F.

**1898 Sanborn Map:** The Site consisted of ten residential dwellings. The property located at present-day 13 Culver Street was depicted with a two-and a half story residential dwelling and one two-story stable/outbuilding. The remainder of the Site consisted of nine residential dwellings, historically identified as 366, 370, 372, 374, 376, and 378 Riverdale Avenue and B, C, D, and H Culver Street. The C Culver Street property was identified as "Low Ground." The adjacent property to the north of the Site consisted of one residential dwelling, identified as 362 Riverdale Avenue. The adjacent property to the east of the Site consisted of vacant land. The adjacent property to the south of the Site, across Culver Street, consisted of the Yonkers Railway Co. Car Barn. The adjacent properties to the west of the Site, across Riverdale Avenue, consisted of three residential dwellings, identified as 369, 371, and 373 Riverdale Avenue. Properties located further north of the Site have been improved with residential dwellings.

**1917 Sanborn Map:** The Site consisted of a total of ten residential dwellings, including the Residential Building identified as present day 13 Culver Street. Two residential properties located on the Site, 374 and 376 Riverdale Avenue, consisted of commercial storefronts along Riverdale Avenue. The residential properties identified as B, C, D, and H Culver Street are now depicted as 15, 17, 21, and 21R Culver Street, respectively. Three stables/outbuildings were identified on the northeast portion of the Site and one automotive use outbuilding was identified on the north-central portion of the Site. No significant changes were observed to the adjacent properties to the north or west of the Site. The adjacent properties to the south of the Site have been improved with residential dwellings identified as 14, 16, 18, 20, 22, and 24 Culver Street and 380, 382, 384, and 386 Riverdale Avenue, and the car barn is no longer depicted. The property to the east of the Site has been occupied by the Cast Stone Products Inc. company and improved with a cement storage area and office building.

**1942 Sanborn Map:** No major changes were noted to the Site or adjacent properties to the north when compared to the 1917 Sanborn map. The adjacent property to the east of the Site has been improved with four structures, of which the southwestern most structure was identified as an automobile garage. Adjacent properties to the south of the Site have been improved with residential dwellings identified as 6, 8, 10, and 12 Culver Street. Further south the property located at 390 Riverdale Avenue has been improved with a large rectangular commercial structure identified as the Ludlow Garage. The adjacent property to the west of the Site, identified as 373 Riverdale Avenue, has been cleared of residential dwellings. Additional residential dwellings were noted to the southwest of the Site across the intersection of Riverdale Avenue and Culver Street. The Hawthorne High School (present-day PEARLS Hawthorne School) was noted further west of the Site.

**1951 Sanborn Map:** The Site consisted of nine residential structures, including the Residential Building on the southeast portion of the Site. The three outbuildings located to the north of the Residential Building are no longer visible. Three automotive garage/outbuildings are identified on north-central portion of the Site. Two adjacent properties to the north, identified as 74 and 76 Post Street, have been improved with automobile garages/outbuildings. The adjacent property to the west, across Riverdale Avenue (373 Riverdale Avenue), has been improved with one commercial structure identified as a gasoline filling station with a canopy and six gasoline storage tanks. No major changes were noted on adjacent properties to the north, east, or south of the Site when compared to the 1942 Sanborn map.

**1956 Sanborn Map:** No major changes were noted to the Site or adjacent properties when compared to the 1951 Sanborn map.

**1957 Sanborn Maps:** No major changes were noted to the Site or adjacent properties when compared to the 1956 Sanborn map with the exception of the filling station property to the west of the Site, which no longer depicted the canopy or the six gasoline storage tanks.

**1971 Sanborn Map:** No major changes were noted to the Site or adjacent properties to the north or west of the Site. The adjacent property to the east has been cleared of all structures and was converted to a park/playground consistent with the location of present day Culver Park identified on historic aerial maps. The adjacent property to the south of the Site identified as 380 to 382 Riverdale Avenue was cleared of the previously identified residential dwellings and converted to vacant land.

**1973 Sanborn Map:** The residential dwellings previously identified as 372, 374, 376, and 378 Riverdale Avenue and 17, 21 and 21R Culver Street have been cleared from the Site. On the 1973 Sanborn map, the Site consisted of three residential dwellings, identified as 15 Culver Street (present-day Residential Building), 360 Riverdale Avenue, and 370 Riverdale Avenue. The Site additionally consisted of three automotive storage garage structures with the remainder of the Site consisting of vacant land. No major changes were noted on adjacent properties to the north, east, or west of the Site when compared to the 1973 Sanborn map. The adjacent property to the, previously identified as 386 Riverdale Avenue, was cleared of the residential dwelling.

**1978 Sanborn Map:** The Site has been improved with one irregular shaped commercial structure, consistent with the present-day construction of the Lot 30 Site Building, and paved parking areas. Three residential structures are identified on the Site. The adjacent property to the south, across Culver Street, identified as 38 Culver Street, has been improved with a commercial structure and potential UST field identified as a gasoline filling station at the location of the present day Citgo-branded service station. No significant changes were noted to adjacent properties to the west, southeast, or north of the Site when compared to the 1973 Sanborn map.

**1989 Sanborn Map:** Two residential dwellings, previously identified as 366 and 370 Riverdale Avenue, are no longer depicted the northwest portion of the Site. No significant changes were noted to the Lot 30 Site Building or adjacent properties to the north, east, or south of the Site when compared to the 1978 Sanborn Map. The gasoline filling station located on the adjacent property to the west of the Site, across Riverdale Avenue, is no longer depicted and the property was acquired by the Nathanial Hawthorne Junior High School. Residential dwellings previously located on the southwest corner of intersection of Culver Street and Riverdale Avenue are no longer identifiable on the 1989 Sanborn map and the property has been converted to vacant land. No significant changes to adjacent properties to the north, east, or south of the Site were noted when compared to the 1978 Sanborn map.

**1991 Sanborn Map:** No significant changes were noted to the Site or adjacent properties to the north, south, east, or west of the Site when compared to the 1989 Sanborn map.

**2004 Sanborn Map:** No significant changes were noted to the Site or adjacent properties to the north, south, east, or west of the Site when compared to the 1991 Sanborn map.

Historical Topographic Maps

Historical topographic maps dated 1897, 1898, 1900, 1947, 1956, 1966, 1979, 1995, 1998, and 2013 were provided by EDR. The following is a description of the Site and the surrounding properties. The EDR Historical Topographic Map Report is included in Appendix F.

**1897 Topographic Map:** The Site appears to be developed with a row of structures presumably the identified residential structures depicted on the 1898 Sanborn map. The surrounding area appears to be moderately developed, with structures denoted by black squares on adjacent properties to the north, south, and west of the Site. The Site and surrounding properties are depicted on yellow shaded land. Three separate railroad lines, each a line of the Hudson River Railroad, are depicted as running parallel to the Hudson River to the east and west of the Site. A roadway corresponding with the location of Riverdale Avenue is present on the map as well as a roadway corresponding with Culver Street.

**1898 Topographic Map:** Increased development was observed in the general vicinity of the Site. No discernable changes were observed on the Site or on adjacent properties when compared to the 1897 topographic map.

**1900 Topographic Map:** No significant changes were observed when compared to the 1898 topographic map.

**1947 Topographic Map:** The Site is depicted as mostly white developed (presumably residential) land, with the a larger structure on the eastern portion of the Site, originating at the corner of present day Livingston Avenue and Culver Street. The adjacent property to the south appears developed by the presence of a black square (typically denoting a structure). The adjacent property to the east appears developed and the presence of a roadway corresponding to the present-day Cliff Avenue was observed as well. An increased amount of development was observed in the surrounding area when compared to the 1900 topographic map, most notably to the north of the Site. Areas marked as green representing vegetated areas are depicted further south, southwest, east, and northeast of the Site.

**1956 Topographic Map:** The Site and surrounding area are depicted on red shaded, indicating an area of increased development and/or paving. No structures are denoted on the Site or adjacent properties. The Hawthorne High School Building is depicted at the intersection of Culver Street and Hawthorne Avenue,

to the west of the Site. Areas marked as green representing vegetated areas are depicted further southwest, east, and northeast of the Site.

**1966 Topographic Map:** The Site and surrounding area are depicted on red shaded land, indicating an area of increased development. No structures are denoted on the Site or adjacent properties. No significant changes were observed when compared to the 1956 topographic map.

**1979 Topographic Map:** No significant changes to the Site or surrounding properties was depicted on the 1979 topographic map. A slight increase in the amount of developed properties can be observed as purple marked squares, which represent newly built structures when compared to the most recent previous topographic map.

**1995, 1998 Topographic Maps:** No significant changes were observed to the Site or surrounding properties when compared to the 1979 topographic map.

**2013 Topographic Map:** The Site and surrounding area are depicted as white shaded land. No discernable structures are observed on the Site or surrounding properties.

### 3.6 Aerial Photography

Aerial photographs of the Site and surrounding properties dated 1940, 1951, 1954, 1962, 1974, 1976, 1984, 1989, 1991, 1994, 1995, 2006, 2008, 2009, 2010, 2011 were provided by EDR. The following is a description of the Site and the surrounding properties. The EDR Aerial Photo Decade Package is included in Appendix C.

**1940 Aerial Photograph:** The Site consisted of presumably residentially developed land, with individual residential structures identifiable on the aerial photograph; however, the number of structures was unable to be determined due to the quality of the photograph. South of the Site, across Culver Street, consisted of several presumably residential structures. West of the Site, across Riverdale Avenue, a larger structure is identifiable on the northwest corner of the intersection of Riverdale Avenue and Culver Street (identified as a filling station on the Sanborn Maps). Additionally, a structure corresponding to the present-day location for the PEARLS Hawthorne School is identifiable further west of the Site, at the northeast corner of the intersection of Culver Street and Hawthorne Avenue. The property to the east of the Site was appears partially developed with at several identifiable structures. North of the Site consisted of potentially residential dwellings.

**1951 Aerial Photograph:** The Site consisted of at nine residential structures. No major changes were noted at the adjacent properties in comparison to the 1940 aerial photograph.

**1954 Aerial Photograph:** No major changes were noted to the Site or adjacent properties when compared to the 1951 aerial photograph.

**1962 Aerial Photograph:** No major changes were noted to the Site or adjacent properties to the north or south of the Site in comparison to the 1954 aerial photograph. The adjacent property to east of the Site has been cleared and no visible structures remain on this property, consistent with the present-day location for Culver Park. The property to the west of the Site, across Riverdale Avenue, appears to be a smaller building for filling station operations, consistent with the 1957 and 1971 Sanborn Maps. The property further to the west of the Site, appears to have been improved with a larger rectangular structure, which is consistent with the present-day building configuration of the PEARLS Hawthorne School.

**1974 Aerial Photograph:** Six of the residential structures previously identified on the Site have been removed and the Site has been improved with one large commercial structure, consistent with the present-day building construction for the Lot 30 Site Building and paved surface areas surrounding the Lot 30 Site Building. Two residential structures remained on the Site to the northwest of the Lot 30 Site Building. One residential structure, identified as the present-day on-Site Residential Building (13 Culver Street), is visible to the east of the Lot 30 Site Building. No major changes were noted to the adjacent properties to the north, west, and east of the Site. The adjacent property to the south of the Site, located at the southeast corner of the intersection of Riverdale Avenue and Culver Street, was cleared of three residential structures and improved with one small structure and one square-shaped canopy, indicative of a gasoline fueling station. This property coincides with the present-day location for the Citgo-branded gasoline fueling station.

**1976 Aerial Photograph:** Due to the poor image quality, the Site and adjacent properties are not clearly discernable on the 1976 aerial photograph.

**1984 Aerial Photograph:** The two residential structures to the northwest of the Lot 30 Site Building are no longer visible and presumed to have been cleared from the Site and turned into a commercial parking lot area. The Site appears to have been improved with additional paved areas in the location of the former residential structures. No major changes were noted at the adjacent properties in comparison to the 1976 aerial photograph with the exception of the filling station to the west no longer being present.

**1989 Aerial Photograph:** Due to the poor image quality, the Site and adjacent properties are not clearly discernable on the 1989 aerial photograph.

**1991 Aerial Photograph:** No major changes were noted at the Site or adjacent properties to the north, west, or south when compared to the 1984 aerial photograph. The property to the east of the Site was improved with paved basketball courts, consistent with the current location of Culver Park.

**1994, 1995, 2006 Aerial Photographs:** No major changes were noted at the Site or adjacent properties in comparison to the 1991 aerial photograph.

**2008 Aerial Photograph:** No major changes were noted at the Site or adjacent properties to the north or west when compared to the 2006 aerial photograph. The property to the east of the Site, identified as Culver Park, has been improved with a reconfiguration of the basketball courts and an area of disturbed paving/surface material was noted on the northern portion of this property. The property to the south of the Site, across Culver Street, identified as a Citgo-branded gasoline fueling station, appears to have been improved with a larger, rectangular shaped, canopy.

**2009 Aerial Photograph:** No major changes were noted at the Site or adjacent properties to the north, west, or south when compared to the 2008 aerial photograph. The adjacent property to the east of the Site, identified as Culver Park, has been improved with the construction of two play areas/equipment on the northern portion of the property, consistent with the present-day configuration of this property.

**2010, 2011 Aerial Photographs:** No major changes were noted at the Site or adjacent properties to the north, west, south, or east when compared to the 2009 aerial photograph.

## 3.7 Historical City Directories

To assist in identifying land use at the Property, Ransom identified historical city directories from EDR. Directories dated 1972 through 2013 were provided by EDR. The Property is located at 13 Culver Street and 372 Riverdale Avenue, Yonkers, NY. The following listings were provided regarding the Property address:

| Year | Address | Name | Operation |
|---|---|---|---|
| 1982, 1987 | 15 Culver Street | John H. McNeil and L M McNeill | Residence |
| 1992 | 15 Culver Street | Lillie M. McNeill | Residence |
| 1999 | 13 Culver Street | Occupant Unknown | Residence |
| 1999 | 15 Culver Street | Elvis Derios<br>Maribel Rios | Residence |
| 2003 | 15 Culver Street | Elvis Derios<br>Floyd Freeman | Residence |
| 2008, 2013 | 13 Culver Street | Floyd Freeman | Residence |
| 1972 | 372 Riverdale Avenue | Thomas J Scollan | Unknown |
| 1977, 1982, 1987 | 372 Culver Street | Goodyear Tire | Automotive repair shop and tire sales. |
| 1992 | 372 Riverdale Avenue | Goodyear Tire & Rubber Co. / The Auto Service Center of Yonkers | Automotive repair shop and tire sales. |
| 2003 | 372 Riverdale Avenue | Occupant Unknown | Unknown |
| 1999, 2008, 2013 | 372 Riverdale Avenue | Goodyear Auto Service Center | Automotive repair shop and tire sales. |

A copy of the City Directory Abstract is included in Appendix G.

## 3.8 Previous Investigations/Assessments

At the time this report was prepared, no knowledge or documentation regarding previous environmental investigations, assessments, and/or remedial activities performed at the Site were identified by Ransom.

## 4.0 SITE RECONNAISSANCE

On May 9, 2017, Erin R. Pente, Senior Environmental Scientist of Ransom, and Lauren Rojewski, Environmental Scientist of Ransom, conducted a general site reconnaissance. The Site visit included a visual reconnaissance of the property grounds and interior portions of the Lot 30 Site Building for the identification of HSP, evidence of releases, and/or potential releases of HSP. Mr. Daniel Romano, the property owner, provided Ransom with access to the Lot 30 Site Building. Access to the Residential Building on-Site was limited to the basement due to safety concerns. Additionally, entry through the north side of the Residential Building was restricted due to the welding shut of two doors. A photographic log is included in Appendix D.

### 4.1 Current Uses and Activities

The Lot 30 Site Building is currently occupied by a retail car sales company identified as West Coast Auto Sales, which has occupied the Lot 30 portion of the Site since the summer of 2016. The service garage and adjoining storage area within the Lot 30 Site Building, as well as the surrounding paved areas, are currently utilized for the storage of vehicles. Goodyear vacated the Site and discontinued automotive service operations and tire sales sometime in 2015. The Residential Building located on the Lot 26 portion of the Site is unoccupied, and according to Mr. Daniel Romano, not suitable for occupancy and has been vacant since sometime in 2009. The remainder of the Lot 26 portion of the Site is currently being utilized as vehicle storage by a neighboring property owner.

### 4.2 Hazardous Materials/Petroleum Storage and Handling

No automotive service operations are currently conducted at the Site. Ransom observed three 55-gallon steel drums containing waste oil within the service garage of the Lot 30 Site Building. The drums were observed to be in good condition with no visible staining on or around the drums; however, visible oil was observed on the drum lids. Various cleaning solvents and motor oil storage containers were observed throughout the Lot 30 Site Building; however, no leaks from these stored materials were observed.

Ransom observed Site-wide solid waste including, but not limited to, gasoline cans, paints cans, propane tanks, cleaning solvents, tires, etc. Additionally, a chest freezer and other former appliances, which may potentially contain ozone depleting substances (ODS), was observed as being stored on the exterior portion of the Residential property. Most of the solid waste item were in good to poor condition; however no visible staining or leaks was observed on or around the materials or storage containers.

### 4.3 Waste Generation, Treatment, Storage, and Disposal

No waste is currently generated at the Site, with the exception of municipal solid wastes and recyclable materials, which are stored with separate dumpsters on the Lot 30 portion of the Site. The dumpsters were observed in good condition and no visible staining or leaks was observed on or around the dumpsters. The removal and proper disposal of these materials are the current responsibility of the tenant, West Coast Autos.

Former automotive repair operations on-Site utilized one 550-gallon waste oil UST, historically located on the southeastern exterior of the Lot 30 Site Building. The waste oil UST was presumptively removed from the Site sometime in 1995, at which time it is presumed that 55-gallon drums were utilized for the storage of waste oil until sometime in 2015. Three 55-gallon drums containing waste oil are still present within the service garage area of the Lot 30 Site Building that require proper disposal. The drums were

observed to be in good condition with no visible staining on or around the drums; however, visible oil was observed on the drum lids.

Approximately six circular stains, indicative of staining related to former drum storage (presumably for waste oil), were observed between Bay 6 and Bay 7 within the Lot 30 Site Building. The concrete in the vicinity of the drums was observed with a large crack; however, no evidence of floor drains was observed in the vicinity of the staining. The presence of this staining represents evidence of historical drum storage and waste generation, which presumably was how waste oil was stored after the waste oil UST was removed in 1995 until 2015, when automobile repair operations ceased.

Two five-gallon buckets, with no lids and partially filled with what appeared to be used cooking oil, were observed on the residential portion of the property. The area around the buckets was overgrown, so observation below the buckets was not feasible.

### 4.4 Polychlorinated Biphenyls

A total of seven of the eight automotive repair bays housed underground hydraulic lifts, and one bay housed an air/hydraulic alignment rack. Two single-piston underground hydraulic lifts were observed within Bay 2 and Bay 5 of the service garage area of the Lot 30 Site Building. Additionally, five double-piston underground hydraulic lifts were observed in Bay 1, Bay 3, Bay 4, Bay 6, and Bay 8 of the service garage and one hydraulic alignment rack was observed within Bay 7 of the service garage. A total of seven underground hydraulic lifts were observed within the service garage area of the Lot 30 Site Building. Five hydraulic reservoirs were observed mounted along the walls within the service garage area as well. Three floor-mounted hydraulic lift control boxes were observed within the service garage area of the Lot 30 Site Building. The concrete around the lifts appears to not be original and it was observed that the date "2006" was carved into the concrete, indicating that the hydraulic lift system upgrades may have taken place circa 2006. Several fluorescent light fixtures were observed throughout the interior of the Lot 30 Site Building as well.

Although not observed within the Site Building, the historic construction plans reviewed at the City of Yonkers Housing and Building Department identified that five of the seven hydraulic lifts potentially had historical underground hydraulic oil reservoirs, which were upgraded to wall-mounted hydraulic underground lifts as noted above. Two former air compressors and associated air filter were depicted as being located within the storage area of the Lot 30 Site Building and were connected (via underground piping) to the three floor-mounted control boxes for the former hydraulic lift operations. Details on each component if the identified current and former systems components that represent RECs are as follows:

- **Hydraulic Lifts and Alignment Rack**: The current underground hydraulic lift system, presumably an upgrade to the former hydraulic lift system circa 2006, and that was apparently not being utilized by the current property owner, includes a total of seven underground hydraulic lifts, five wall-mounted hydraulic fluid reservoirs/control boxes, three floor-mounted control boxes (where the control box between Bays 3 and 4 was presumably disconnected) and two electric air compressors that were observed during site reconnaissance activities within the service garage area of the Lot 30 Site Building. One hydraulic alignment rack was also observed within Bay 7; however, its age is unknown. Two single-piston hydraulic lifts were observed within Bay 2 and Bay 5, and five double-piston underground hydraulic lifts were observed within Bay 1, Bay 3, Bay 4, Bay 6, and Bay 8 of the service garage area of the Lot 30 Site Building during Site reconnaissance activities. Based on historical plans, the single-piston lifts were installed to approximately 8.5 feet below floor grade and the double-piston lifts were installed to

approximately 8 feet below floor grade. The hydraulic lift areas were observed to be in good condition; however, three vehicles were parked directly over the lifts within Bay 2, Bay 3, and Bay 6. Based on the former operations and unknown condition of the subsurface in the vicinity of the hydraulic lifts, there is a potential for residual soil impacts from in these areas. Further investigation is warranted.

- **Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes**: A total of five wall-mounted hydraulic fluid reservoirs were observed along the perimeter of the service garage area. The hydraulic fluid reservoirs were observed to be in good condition with minimal staining on the concrete surface beneath them. These reservoirs were presumably installed sometime in or around 2006, following the removal of the former underground hydraulic lift tanks. Residual hydraulic fluid was observed within the reservoirs. Piping emanating from the reservoirs to below the building slab was unobservable during Site reconnaissance activities; therefore, the condition of these areas is unknown. Based on the former operations and unknown condition of the subsurface in the vicinity of the hydraulic fluid reservoirs, there is a potential for residual soil impacts in these areas. Further investigation is warranted.

- **Former Hydraulic Lifts, Air/Hydraulic Alignment Rack and Underground Hydraulic Oil Reservoirs**: According to the original construction plans of the Lot 30 Site Building provided by the City of Yonkers Housing and Building Department, the Lot 30 Site Building had seven underground hydraulic lifts and one air/hydraulic alignment rack. The former lift system utilized approximately five underground hydraulic oil reservoirs, two air compressors with an associated air filter, and three floor-mounted control boxes; however, the status of the formerly used underground reservoirs is unknown. These hydraulic lifts and associated reservoirs were installed circa 1974 when the Lot 30 Site Building was erected, and were taken out of use circa 2006, when the current hydraulic lifts and wall-mounted hydraulic oil reservoirs were installed. The specific details of the upgrades to the system are unknown; however, it is presumed that the number of pistons, underground housing, and location of the lifts were the same as present day. Based on historical plans, the single-piston lifts were installed to approximately 8.5 feet below floor grade and the double-piston lifts were installed to approximately 8 feet below floor grade. The underground hydraulic oil reservoirs were unobservable during Site reconnaissance activities. Further, information regarding their removal was not identified by, or provided to, Ransom, and the condition of these underground areas is unknown.

- **Hydraulic Lift Control Boxes**: A total of three floor-mounted control boxes were observed throughout the service garage area; one between Bay 1 and 2, one between Bay 3 and 4, and one between Bay 5 and 6. The control box between Bays 3 and 4 was presumably disconnected since both associated lifts had wall-mounted hydraulic fluid reservoirs/control boxes. The control boxes were observed to be in good condition with visible staining on the concrete surface beneath them. These control boxes were presumably installed circa 1974, when the Lot 30 Site Building was erected. The presence of the boxes restricted observation to conditions below the box itself; therefore, the subsurface conditions below the control boxes are unknown.

- **Former Air Compressors**: Two former air compressors and one associated air filter were identified on construction plans identified from the City of Yonkers Housing and Building Department. The former air compressors and filter were located within the storage area of the Lot 30 Site Building and were connected (via underground piping) to the three floor-mounted control boxes for the former hydraulic lift operations. These compressors were installed circa

1974 when the Lot 30 Site Building was erected, and were taken out of use circa 2006, when presumably the two electric air compressors were installed. The out-of-use air filter was observed during the Site reconnaissance. No evidence of former discharge locations were observed during Site reconnaissance activities, and the floor where these air compressor were formerly stored was unobservable due to the presence of parked vehicles.

### 4.5 Asbestos-Containing Building Materials

Based upon the construction date of the Lot 30 Site Building and Residential Building, 1974 and 1900, respectively, asbestos-containing building materials (ACM) may be present within the Lot 30 Site Building and Residential Building. Additionally, a substance indicative of asbestos joint compound was observed along piping within the boiler room of the Site Lot 30 Building.

### 4.6 Lead Paint

Lead based paint was banned for residential use in the United States in 1978, by the U.S. Consumer Product Safety Commission (16 CFR 1303). Based on the construction date of the Lot 30 Site Building (1974) and the Residential Building (1900), it is possible that lead-based paints (LBPs) are present in the Lot 30 Site Building and/or the Residential Building.

### 4.7 Mercury

During Ransom's interior reconnaissance of the Lot 30 Site Building and interior reconnaissance of the basement of the Residential Building, fluorescent bulbs were observed that may contain mercury vapor.

### 4.8 Storage Tanks (above or below ground) and Piping

#### 4.8.1 Aboveground Storage Tanks

No aboveground storage tanks (ASTs) were observed during Site reconnaissance activities.

#### 4.8.2 Underground Storage Tanks

Ransom did not observe any evidence of the presence of current/active USTs during Site reconnaissance activities. However, based on a review of records identified at the City of Yonkers Housing and Building Department, the following former USTs were identified:

- **Former 3,000-gallon Fuel Oil UST**: One 3,000-gallon fuel oil UST was presumably removed from the Site in August 1995 according to permitting documentation identified at the City of Yonkers Housing and Building Department. The former fuel oil UST was located on the eastern exterior of the Lot 30 Site Building. This UST was presumably installed during the initial construction activities sometime in 1974. Permitting documentation indicated that UST removal activities were completed by September 1995; however, documents reviewed did not reference UST content or capacities. Based on known information, the UST referenced within the permitting documentation is presumed to be the former 3,000-gallon fuel oil UST; however, detailed UST removal documentation was not identified by Ransom.

- **Former 550-gallon Waste Oil UST**: One 550-gallon waste oil UST, historically utilized in relation to former automotive service activities, was presumably removed from the Site in August

1995 according to permitting documentation identified at the City of Yonkers Housing and Building Department. This UST was presumably installed during the initial construction activities sometime in 1974. Permitting documentation indicated that UST removal activities were completed by September 1995; however, documents reviewed did not reference UST content or capacities. Based on known information, the UST referenced within the permitting documentation is presumed to be the former 550-gallon waste oil UST; however, detailed UST removal documentation was not identified by Ransom.

## 4.9 Surface Conditions

### 4.9.1 Drains

A total of four sealed floor drains and four active floor drains were observed in the Lot 30 Site Building during reconnaissance activities. Sealed floor drains were observed in the following locations throughout the Lot 30 Site Building; southwest portion of the service garage, parts storage room within the service garage, southwest portion of the boiler room, and within the former employee locker room. Active floor drains were observed in the following locations throughout the Lot 30 Site Building; the western most restroom, the eastern most restroom, the utility sink within the service garage, and within the existing storage area. Additionally, one clean out pipe was observed in the southwest portion of the service garage of the Lot 30 Site Building. Although not observed within the Site Building, the historic construction plans identified at the City of Yonkers Housing and Building Department reviewed during the site reconnaissance also depicted seven former floor drains, one near each hydraulic lift, one former/inactive 4-inch cast iron drainage pipe for the former hydraulic lift floor drains, and one active 6-inch drainage pipe for the drains along the northern portion of the Lot 30 Site Building. The former/inactive 4-inch cast iron drainage pipe was depicted as leading to a grease and sand interceptor. The Lot 30 Site Building's drainage system reportedly discharged and/or currently discharges to the municipal sanitary sewer system. No staining or evidence of a release was observed at the drains. Due to the inaccessibility of the Residential Building, floor drain locations were not noted during Site reconnaissance activities. Details on the Lot 30 Site Building floor drains and interceptor are as follows:

- **Service Garage Sealed Floor Drain**: One sealed floor drain was identified in the vicinity of the Bay 8 hydraulic lift and the eastern most hydraulic fluid reservoir, which reportedly connected to the former/inactive 4-inch cast iron drainage pipe. No staining or evidence of impact was noted during site reconnaissance activities surrounding the floor drain; however, the condition of the underground drainage system that led to the municipal sanitary sewer line is unknown. Due to the close proximity of the floor drain to the former automotive repair activities, there is a potential for residual soil and/or groundwater impacts from this area. Further investigation is warranted.

- **Boiler Room Sealed Floor Drain**: One sealed/debris filled floor drain was identified within the boiler room of the Lot 30 Site Building, which reportedly connected to the 6-inch cast iron drainage pipe. Although this floor drain is currently sealed, historic use of the fuel oil fired boiler and observed staining on the exterior of the boiler (REC 4), and since the condition of the underground drainage system that led to the municipal sanitary sewer line is unknown, there is a potential for residual soil and/or groundwater impacts in this area. Further investigation is warranted.

- **Parts Room Sealed Floor Drain**: One sealed floor drain was identified within the parts room of the Lot 30 Site Building, which reportedly connected to the 6-inch cast iron drainage pipe. No

staining or evidence of impact was observed in the vicinity of this drain; however, the condition of the underground drainage system that led to the municipal sanitary sewer line is unknown.

- **Bathroom Floor Drains**: Two active floor drains were identified in each bathroom area just north of the eight service bays, which reportedly connect to the 6-inch cast iron drainage pipe. No staining or evidence of impact was noted during site reconnaissance activities; however, the condition of the underground drainage system that leads to the municipal sanitary sewer line is unknown.

- **Employee Locker Room Sealed Floor Drain**: One sealed floor drain was identified in the former employee locker room just north of the eight service bays, which reportedly connected to the 6-inch cast iron drainage pipe. No staining or evidence of impact was noted during site reconnaissance activities; however, the condition of the underground drainage system that led to the municipal sanitary sewer line is unknown.

- **Tire Wash Area Floor Drain**: One floor drain was identified in the curb utility sink just north of the eight service bays that was previously utilized as a former tire wash area, and which reportedly connects to the 6-inch cast iron drainage pipe. No staining or evidence of impact was noted during site reconnaissance activities; however, the condition of the underground drainage system that leads to the municipal sanitary sewer line is unknown.

- **Former Hydraulic Lift Floor Drains**: Seven former floor drains, which reportedly connected to a former/inactive 4-inch cast iron drainage pipe were identified on historic construction plans identified at the City of Yonkers Housing and Building Department. Former floor drains were located beneath the original hydraulic lifts within Bay 1, Bay 2, Bay 3, Bay 4, Bay 5, Bay 6, and Bay 8 of the service garage. The former/inactive 4-inch cast iron drainage pipe was identified leading from the former hydraulic lift floor drains to a former/inactive grease and sand interceptor (REC 1G). Site redevelopment activities were presumably completed sometime in or around 2006; however, Ransom did not obtain information that confirms the floor drains, drainage pipe, and grease and sand interceptor were removed or properly abandoned in-place. Further, the condition of the underground drainage system that led to the municipal sanitary sewer line is unknown.

- **Former Grease and Sand Interceptor**: A former underground grease and sand interceptor was identified on historic construction plans identified from the City of Yonkers Housing and Building Department. The former underground grease and sand interceptor was located in the western portion of the service garage area of the Lot 30 Site Building that received overflow/waste from the Lot 30 Site Building's hydraulic lift areas. As the former grease and sand interceptor was not observed during the Site reconnaissance, Ransom was unable to inspect this area.

## 4.10 Other Conditions of Concern

### 4.10.1 Inactive Boiler

One inactive oil fired boiler was observed within the boiler room of the Lot 30 Site Building. The oil-fired burner, which was situated on a concrete slab, was observed to be in poor condition with heavy rusting visible on the exterior of the boiler. Ransom was unable to inspect the area beneath the oil-fired

burner during Site reconnaissance activities. Waste ash, which may contain heavy metals, was observed within the base of the boiler.

### 4.10.2 Air Compressors

Two stationary electric air compressors were observed within the Lot 30 Site Building during site reconnaissance activities mounted and staged on a wood platform. The air compressors were 80-gallon capacity with a one-piece cast iron crankcase for lubrication oil and an oil-lubricated pump with three cast iron cylinders. The compressors were observed to be in good condition with no evidence of staining on or around the units and the concrete floor below the units was observed intact with no cracks or staining.

## 5.0 REGULATORY FILE SEARCH

As part of Ransom's assessment of the Site, EDR conducted an environmental database search. The search included reviews of federal and state database records and was conducted in general accordance with the specific requirements of ASTM International E 1527-13. A listing of the search radii for each environmental database searched is included in the EDR Report. A copy of the EDR Report is provided in Appendix E. The table below summarizes the regulatory database findings within ¼-mile of the Site, where sites between ¼-mile and 1-mile are not anticipated to impact the Site. Based on local topography, groundwater at the Site is anticipated to flow to the north-northwest, toward the Hudson River. Therefore, properties located to the south-southeast are anticipated to be hydrologically upgradient from the Site.

| EDR Site ID(s) | Property Location | Direction/ Distance from Site | Database | Site Impact | Rationale |
|---|---|---|---|---|---|
| A1, A2 | Goodyear Auto Service Center<br>372 Riverdale Avenue, Yonkers NY | Target Property | RCRA-CESQ, FINDS, ECHO, NY MANIFEST, RI Manifest, EDR Hist Auto | Not Anticipated | No violations or Spill Numbers were identified in association with the Site. See below. |
| A3, A7, A8 | Citgo Service Station / 380 Riverdale Avenue Inc.<br>380 Riverdale Avenue, Yonkers NY | Southwest 48-feet | NY Spills, NY UST, EDR Historic Auto | Potential | Identified on list of NY Spills. See below. |
| A4, A5 | ConEdison Trench 1111<br>Intersection of Riverdale Avenue and Culver Street, Yonkers NY | West-southwest 63-feet | RCRA-LQG, NJ Manifest, NY Manifest | Not Anticipated | No violates were identified in association with this listing. See below. |
| A6 | Lewis Property<br>10 Culver Street, Yonkers NY | South-southeast 91-feet | NY Spills | Not Anticipated | NY Spills No. is listed as closed/inactive. See below. |
| B9 | 377 Riverdale Avenue, Yonkers NY | West 47-feet | EDR Hist Auto | Potential | No violations or Spill Numbers were identified in association with the Site. See below. |
| D14, D15, D16, D17, D18 | Devonshire 2010 Inc. / Devonshire Tire / Devonshire Lane Service<br>390 Riverdale Avenue, Yonkers NY | South 244-feet | NY UST, NY AST EDR Hist Auto, NY Spills, RCRA NonGen/NLR, FINDS, ECHO | Potential | Identified on list of NY Spills. See below. |
| E23 | Rosario Residence<br>15 Cliff Avenue, Yonkers NY | East 98-feet | NY Spills | Not Anticipated | NYSDEC determined that no further action was required. See below. |

5.1 Goodyear Auto Service Center (A1, A2)

The Site was listed on several databases identified during the EDR search. The Site was listed on the RCRA-CESQ database as the Goodyear Auto Service Center and was listed as a conditionally exempt small quantity generator/handler of hazardous waste. No violations were associated with this database listing. Additionally, the Site was listed on the EDR database of Historical Auto Stations as the Goodyear Auto Service Center for the years 1999, 2000, 2002, 2009, 2010, and 2012.

5.2 Citgo Service Station (A3, A7, A8)

The property located at 380 Riverdale Avenue was identified as a Citgo-branded gasoline filling station was identified on the NYSDEC database of documented spills (NY Spills) as Site ID No. 371999 and listed as active. Listings for the Citgo Service station included the following:

- Spill No. 0608110 was issued on October 16, 2006 for a known release of petroleum products, initially identified during soil sampling activities. This spill incident is listed as active on the NYSDEC Spill Incidents Database.

- Spill No. 0202712 was issued on June 13, 2002 for a release of gasoline identified during tank testing activities. This spill incident is listed as active on the NYSDEC Spill Incidents Database.

- Spill No. 110501 was issued on February 1, 2002 for a release of transmission fluid to a drain located on the property. No records were available through the NYSDEC Spill Incidents database for this incident.

- NY UST Facility ID No. 3-800744 is an active facility with two 6,000-gallon gasoline USTs (Tank 001 and 002) and one 6,000-gallon diesel UST (Tank 0003), installed on July 1, 2003. Historically, this property operated with two 6,000-gallon gasoline USTs (Tank 1 and Tank 2) and one 6,000-gallon diesel UST (Tank 3), originally installed on July 1, 1973.

- EDR Historical Auto Stations identify potential automotive facilities based on historical operator names. The Citgo service station was identified at this address in 2011 and 2012.

Based on the identified spill numbers and close proximity to the Site, Ransom concludes that this facility has the potential to have impacted the Site.

5.3 ConEdison Trench 1111 (A4, A5)

A property located at the intersection of Riverdale Avenue and Culver Street was identified on the EDR list of RCRA-LQG and NJ Manifest sites, this property was identified as a large quantity generator of hazardous wastes. This property is currently maintained by ConEdison and no violations were reported in connection with this property.

5.4 Lewis Property (A6)

The Lewis Property, located at 10 Culver Street, Yonkers NY, was identified on the NY Spills database. Spill No. 193717 was reported for the release of approximately 2-gallons of fuel oil (No. 2), originating from a leak in the fill pipe, on May 15, 1991. This Spill No. is listed as inactive and due to the *de minimis*

nature of the release, this case is not expected to impact the environmental conditions of the Site and no further investigation is recommended.

5.5 377 Riverdale Avenue (B9)

The property located at 377 Riverdale Avenue (presently known as 373 Riverdale Avenue) was identified on the EDR list of Historic Auto Stations as the Riverdale Auto Service Center Inc. for the years 2011 and 2012. No further information was provided. Due to the sidegradient location of this property, its former proximity to the Site, and its depicted service station use from at least 1940 to 1978, further investigation is warranted.

5.6 Devonshire 2010 Inc. (D14, D15, D16, D17, D18)

This property located at 390 Riverdale Avenue, identified as Devonshire 2010 Inc., and the present-day location for the Devonshire Discount Tire, Auto Body & Repair Center, was identified on several EDR listings. Based on the statuses of the EDR listings for this facility and its sidegradient location relative to the Site, no further investigation is recommended. Listings for the Devonshire facility included the following:

- NY UST Facility ID No. 3-138045 is an inactive UST facility. Three 6,000-gallon gasoline USTs and one 1,000-gallon UST of unknown contents are listed as closed and abandoned in-place.

- New York AST Facility ID No. 3-138045 is an active facility which currently utilizes one 1,000-gallon #2 fuel oil AST, two 275-gallon waste oil AST. Two 275-gallon ASTs of unknown contents were removed from this property on January 1, 2006.

- EDR Historical Auto Stations identify potential automotive facilities based on historical operator names. One Transmission Parts Inc. was identified at this address in 2007. The Firestone Tire & Auto Service Center was listed at this address in 2008. The Riverdale Transmission Parts Inc. was listed at this address for 2009. The Firestone Devonshire Tire Company was listed at this address in 2010 and the Devonshire Tire Co. for the year 2011.

- NY Spills No. 1007244 was issued for the discovery of a release of fuel oil (No. 2) to soils during the removal of one 1,000-gallon UST in January of 2011. A total of 715.89 tons of petroleum impacted soils were removed from this property at this time. A closure status was issued in relation to this spill incident on January 26, 2011.

- This property was identified on the RCRA NonGen/NLR, FINDS, and ECHO databases as a non-generator, handler of hazardous waste. No violations were identified in relation to the handling of hazardous materials on the aforementioned databases.

Based on the identified spill numbers and close proximity to the Site, Ransom concludes that this facility has the potential to have impacted the Site.

5.7 Rosario Residence – 15 Cliff Avenue (E23)

The property located at 15 Cliff Avenue was identified on the NY Spills Database as Facility ID No. 509913. NY Spills No. 1503602 dated August 17, 2015 was issued to this property in response to a known release of #2 fuel oil originating from a 1,000-gallon heating oil AST during removal activities.

The NYSDEC concluded that due to the limited nature of the release and subsequent clean-up activities, that no further action was warranted.

## 5.8 Orphan Sites

An Orphan Site is a listed site in the same zip code as the subject Site which cannot be mapped because of inadequate address information. Ransom reviewed the four Orphan Sites and determined that they are located in positions considered to be cross-gradient, downgradient, or hydrologically isolated from the Site, or are beyond the applicable ASTM search parameters. Therefore, it is unlikely that these Orphan Sites will adversely impact environmental conditions at the Site.

## 6.0 ADJACENT PROPERTIES

The Site is adjoined by the following properties:

- To the north, the Site is bordered by residential properties, including the 362 Riverdale Avenue, 76 Post Road, 80 Post Road, 82 Post Road, and 84 Post Road. Further to the north are more residential properties and mixed use commercial-residential areas.

- To the south of the Site, across Culver Street, is the Citgo-branded gasoline filling station located at 380 Riverdale Avenue. Additionally, residential properties are located to the south of the Site, across Culver Street, and are located at 10, 12, 14, 16, 18, 20, and 22 Culver Street. Further south of the Citgo-branded gasoline filling station is the Devonshire Discount Tire, Auto Body & Repair Center.

- To the east of the Site is the Culver Park, a City of Yonkers operated park and playground area. Culver Park is located at the intersection of Culver Street and Livingston Avenue.

- To the west of the Site, across Riverdale Avenue, is the PEARLS Hawthorne School, located at 350 Hawthorne Avenue.

The southern adjacent Citgo-branded gasoline filling station and Devonshire Discount Tire, Auto Body & Repair Center represent potential environmental concerns due to their proximity to the Site and their historical release cases.

## 7.0 VAPOR INTRUSION ASSESSMENT

Ransom has identified potential releases of volatile contaminants on the Site. Ransom has also identified historic potential or known releases of volatile contaminants from off-site properties immediately adjacent and upgradient of the Site. Therefore, Ransom recommends performance of a Vapor Intrusion Evaluation and Assessment as part of a Phase II limited subsurface investigation. If the results of that assessment indicate that a potential vapor intrusion risk exists, Ransom will perform a Vapor Intrusion Risk Analysis, which will present alternatives for mitigation of the risk, if warranted.

## 8.0 DATA GAPS

At the time this report was prepared, several information requests remain outstanding, including the City of Yonkers Fire Department, the United States Army Corp of Engineers and NYSDEC requests. However, upon receipt and review, pertinent information provided by the above-mentioned agencies will be forwarded in an addendum to this report. This data gap represents an environmental concern warranting additional investigation to assess RECs in connection with the Site.

## 9.0 CONCLUSIONS AND RECOMMENDATIONS

### 9.1 Conclusions

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM International E 1527-13 and the Corporate Services Agreement, for the Site identified by the City of Yonkers Assessor's Tax Map Section 1, Block 129, Lots 26 and 30. Any exceptions to, or deletions from, this practice are described in Section 1.2 of this report. Based on the information identified during this ESA, Ransom has identified the following RECs in connection with the Site:

- **REC 1 – Automotive Repair Drainage System**: A total of 11 sealed/inactive/former floor drains, four active floor drains, one former/inactive 4-inch cast iron drainage pipe, and one active 6-inch drainage pipe were either observed or identified throughout the Lot 30 Site Building. The former/inactive 4-inch cast iron drainage pipe was depicted as leading to a grease and sand interceptor. The Lot 30 Site Building's drainage system reportedly discharged and/or currently discharges to the municipal sanitary sewer system. The identified floor and appurtenant drainage pipes, and former grease and sand interceptor, represent RECs as follows (details are presented within Section 4.9.1 of this Report):
    - REC 1A – Service Garage Sealed Floor Drain;
    - REC 1B – Boiler Room Sealed Floor Drain;
    - REC 1C – Parts Room Sealed Floor Drain;
    - REC 1D – Bathroom Floor Drains;
    - REC 1E – Employee Locker Room Sealed Floor Drain;
    - REC 1F – Tire Wash Area Floor Drain;
    - REC 1G – Former Hydraulic Lift Floor Drains; and
    - REC 1H – Former Grease and Sand Interceptor.

  Due to the close proximity of the sealed/inactive/former floor drains and former underground grease and sand interceptor to the former automobile repair activities, there is a potential for soil and/or groundwater impacts within this area. Further investigation is warranted.

- **REC 2 – Automotive Repair Hydraulic Lift Systems**: A total of seven of the eight automobile repair bays housed underground hydraulic lifts, and one bay housed an air/hydraulic alignment rack. It is believed that at least five of the seven hydraulic lifts historically had underground hydraulic oil reservoirs, which were upgraded to wall-mounted hydraulic underground lifts. Two former air compressors and associated air filter were located within the storage area of the Lot 30 Site Building and were connected (via underground piping) to the three floor-mounted control boxes for the former hydraulic lift operations. The identified current and former system components represent RECs as follows (details are presented within Section 4.4 of this Report):
    - REC 2A – Hydraulic Lifts and Alignment Rack;
    - REC 2B – Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes;
    - REC 2C – Former Hydraulic Lifts, Air/Hydraulic Alignment Rack and Underground Hydraulic Oil Reservoirs;

- REC 2D – Hydraulic Lift Control Boxes; and
- REC 2E – Former Air Compressors.

Based on the former operations and unknown condition of the subsurface in the vicinity of the current/former hydraulic lifts/alignment rack, wall-mounted hydraulic fluid reservoirs, underground hydraulic oil reservoirs, hydraulic lift control boxes, and former air compressors, there is a potential for soil impacts within these areas. Further investigation is warranted

- **REC 3 – Vehicle Storage**: Used vehicle storage was observed within the northeastern most storage area of the Lot 30 Site Building, as well as throughout the paved parking areas surrounding the Lot 30 Site Building. The areas beneath the parked vehicle was inaccessible during Site reconnaissance activities; therefore, Ransom was unable to ascertain the integrity of the surface materials in these areas. Further investigation is warranted in all vehicle storage areas throughout the Site.

- **REC 4 – Inactive Oil-Fired Boiler System**: One inactive oil-fired burner was observed in the boiler room of the Lot 30 Site Building. The oil-fired burner was observed to be in poor condition with heavy rusting and staining visible on the exterior of the boiler. Due to the presence of dust and dim lighting, the condition of the floor below the boiler could not be fully assessed. Additionally, waste ash, which may contain heavy metals, was observed within the base of the boiler. Due to the poor condition of the oil-fired burner, close proximity to a former floor drain, inability to access the area beneath the oil-fired burner, and presence of waste ash, there is a potential for residual soil impacts in this area. Further investigation into the soil conditions in this area is warranted.

- **REC 5 – Former 3,000-gallon Fuel Oil UST**: One former 3,000-gallon fuel oil UST was identified on historic construction plans on the eastern exterior side of the Lot 30 Site Building. An associated pump was identified on the eastern most portion of the storage area within the Lot 30 Site Building as well. The fuel oil UST depicted on the historical plan was connected to a pump and subsequently to the oil-fired boiler (REC 4) via underground piping. A certificate of completion was issued by the City of Yonkers Bureau of Housing and Buildings on September 19, 1995 for "removed underground oil tanks," presumably indicating the removal of the 3,000-gallon fuel oil UST. However, due to the vague nature of the certificate of completion and lack of additional documentation for the closure activities, further investigation is warranted regarding this REC.

- **REC 6 – Former 550-gallon Waste Oil UST**: One former 550-gallon waste oil UST was identified on historic construction plans on the southeastern exterior or of the Lot 30 Site Building. A certificate of completion was issued by the City of Yonkers Bureau of Housing and Buildings on September 19, 1995 for "removed underground oil tanks," presumably indicating the removal of the 550-gallon waste oil UST. However, due to the vague nature of the certificate of completion and lack of additional documentation for the closure activities, further investigation is warranted regarding this REC.

- **REC 7 – 55-Gallon Waste Oil Drum Storage**: Approximately six circular stains, indicative of former drum storage (presumably for waste oil), were observed between Bay 6 and Bay 7 within the Lot 30 Site Building. The concrete in the vicinity of the drums was observed with a large crack; however, no evidence of floor drains was observed in the vicinity of the staining. The

presence of this staining represents evidence of historical drum storage and waste generation, which presumably was how waste oil was stored after the waste oil UST was removed in 1995 until 2015, when automobile repair operations ceased. Due to the observed crack in the concrete and the evidence of staining in this area, further investigation of the soil conditions in this area is warranted.

Additionally, Ransom observed three 55-gallon steel drums containing waste oil within the service garage area of the Lot 30 Site Building, presumably generated by former automobile repair operations. The drums were observed to be in good condition with no visible staining on or around the drums; however, visible oil was observed on the drum lids. No further investigation is recommended in connection with the existing 55-gallon waste oil drums; however, proper removal and off-site disposal is required prior to Site redevelopment.

- **REC 8 – Current/Former Residential Use**: Ransom identified one current and eight former residential buildings associated with the Site. The existing Residential Building is known to use fuel oil for heating. The historical heating source(s) for the former residential structures are unknown. Lastly, private septic systems are also associated with residential use. Therefore, there is a potential for one or more heating oil (No. 2) USTs and/or one or more septic systems to be present on-Site as follows:

    - **REC 8A – Known Fuel Oil Use at the Residential Building**: Property records were identified by Ransom for the Residential Building located on the Lot 26 portion of the Site, which indicated the usage of fuel oil at this property. Ransom was unable to confirm the presence of a fuel oil tank or boiler at the Residential Building; however, a sealed fill pipe was observed on the eastern side of the structure, along the foundation of the Lot 30 Site Building, indicating the potential presence of a fuel oil AST in the basement. Further, two metal doors were observed to be welded shut during site reconnaissance activities of the Residential Building, barring access into a room where a suspect boiler was located.

    - **REC 8B –Former Residential Use**: Historic records and construction plans identified the presence of eight residential structures (not including the current Residential Building) at the Site prior to redevelopment activities in 1974 and 1980. Specific documentation regarding these structures was not identified by, or provide to, Ransom.

  Due to the potential for historic fuel oil usage on the Lot 26 portion of the Site and based on the absence of a known heating source, UST, and/or septic system information for the former residential houses, further investigation is warranted regarding this REC.

- **REC 9 – Potential Fill**: The 1898 Sanborn Map indicted one of the former residential properties with "Low Ground," which indicates that the property had a potential to have been historically filled. The location of this "Low Ground" indication is mostly beneath the present-day Lot 30 Site Building. Based on the unknown source and characteristics of this potential fill material, Ransom believes that the potential exists for off-site fill material to have been brought on-Site; therefore, Ransom recommends that a subsurface investigation be conducted to assess whether historical fill is present on-Site and if it has impacted the environmental conditions at the Site.

- **REC 10 – Potential Off-site Sources**: Ransom identified two current off-site uses where known or potential past discharges of hazardous chemicals from facilities, including a gasoline filling

station and an automotive repair facility, have or may have occurred upgradient of the Site and one off-site use where potential past discharges of hazardous chemicals from facilities, including a former gasoline filling may have occurred sidegradient of the Site. The following potential off-site sources were identified in close proximity to the Site, and represent RECs.

- **REC 10A – Off-Site Citgo Service Station**: The southerly adjacent Citgo-gasoline filling station was identified as an active service station with multiple active NY Spills incident numbers associated with this property.

- **REC 10B – Off-Site Devonshire Discount Tire, Auto Body & Repair Center**: A property located approximately 390 feet to the south of the Site was identified as an active auto body and repair center that has a NY Spills incident with a "Closed" status.

- **REC 10C – Former Riverdale Auto Service Inc.**: The property located 377 Riverdale Avenue, located adjacent (across Riverdale Avenue) to the west and sidegradient of the Site, was identified as a potential off-Site source due to its use as a former gasoline service station from at least 1940 through at least 1978; however, no further information was identified.

Due to the close proximity, NY Spill incident(s) and/or former/current use, Ransom recognizes the potential for off-Site impact to the Site from the current filling station, active auto body and repair center, and former off-site service station operations; therefore, further investigation is warranted.

In addition to the RECs identified above, Ransom identified the following condition of potential environmental concern, which is being documented as a *de minimis* condition as follows:

- **Site-Wide Solid Waste**: Ransom observed Site-wide solid waste including, but not limited to, gasoline cans, paints cans, propane tanks, cleaning solvents, tires, 5-gallon buckets with cooking oil, etc. Additionally, a chest freezer and other former appliances, which may potentially contain ozone depleting substances (ODS), was observed as being stored on the exterior portion of the Residential property.

Some additional environmental concerns were identified which are considered non-scope under ASTM, but were recognized as areas of potential business environmental risk. Specifically, based on the construction date of the Lot 30 Site Building (1974) and the Residential Building (pre-1897), hazardous building materials may be present in the Site Buildings, including asbestos-containing materials (ACM), polychlorinated biphenyls (PCBs) in fluorescent light ballasts, lead-based paint (LBP), and mercury-containing fluorescent lights and/or other equipment. Prior to demolition of the current Site Buildings, identified hazardous building materials should be removed and disposed of in accordance with local, state, and federal regulations.

Based on the information identified during this Phase I ESA, Ransom did not identify any CRECs or HRECs in connection with the Site.

## 9.2 Recommendations

Based on the information identified during this assessment, Ransom concludes that additional investigation is warranted. Ransom makes the following recommendations:

- Based upon the construction date of the Site Building (1974) and Residential Building (pre-1897), hazardous building materials may be present within the Site buildings. Ransom recommends the performance of a comprehensive Hazardous Material Inventory (HMI) survey prior to demolition of the Site Buildings.

- Ransom recommends that sub-slab soil samples be collected along the drainage pipes and on-Site sanitary sewer lines associated with the automotive repair floor drains (REC 1). In an effort to target potential heavily impacted areas, video inspection of the pipes for evidence of cracks or breaches could be conducted as part of the geophysical survey recommended below. Based on the findings of the video inspection, soil sampling could be biased towards those areas of pipe cracks/breaches.

- Ransom recommends the completion of a geophysical survey across the Site in an effort to: (1) confirm the removal of the 3,000-gallon fuel oil UST (REC 5) and 550-gallon waste oil UST (REC 6) presumably removed from the Site in 1995, and (2) assess if one or more historic USTs, former product piping, and/or septic tanks are present from the current/former residential use (REC 8). If anomalies are identified, further subsurface investigation may be warranted.

- A subsurface soil and groundwater investigation is recommended prior to the initiation of construction activities. Ransom recommends the following soil and groundwater monitoring program be completed prior to redevelopment activities:

    - Ransom recommends the collection of sub-slab soil and groundwater samples from beneath the current/former hydraulic lifts and one hydraulic alignment rack (RECs 2A and REC 2C) within the Lot 30 Site Building.

    - Ransom recommends the collection of sub-slab soil samples from beneath the five identified wall-mounted hydraulic fluid reservoirs (REC 2B) within the Lot 30 Site Building immediately adjacent to the exposed subsurface piping.

    - Ransom recommends the collection of sub-slab soil samples immediately adjacent to the three floor-mounted control boxes (REC 2D) within the Lot 30 Site Building.

    - Ransom recommends the collection of subsurface soil and groundwater samples in the locations of the former 3,000-gallon fuel oil UST (REC 5) and 550-gallon waste oil UST (REC 6).

    - Ransom recommends the collection of subsurface soil samples at the location of the crack observed near the former waste oil drum storage/staining (REC 7).

    - Ransom recommends the collection of subsurface soil samples at the location of the potential historical fill area (REC 9).

    - Ransom recommends the installation of temporary groundwater monitoring points and/or soil borings along the southern boundary of the Site to evaluate potential off-Site impacts to the Site (REC 10).

- Since there were physical obstructions (e.g., stored vehicles, dirt, welded doors, etc.), which represent a significant data gap, and based on historical operations, Ransom recommends the

physical obstructions be removed and further inspection completed of the ground surface areas beneath the former air compressor (REC 2E), the stored vehicles (REC 3), the inactive oil-fired burner (REC 4) and potential residential fuel-oil fired boiler (REC 8). Further investigation activities may be warranted based on the findings.

- Ransom recommends the proper disposal of the fuel oil-fired burner and its contents (e.g., waste ash) (REC 8) identified within the Lot 30 Site Building. After removal, Ransom recommends further inspection of the surface areas beneath the fuel oil-fired burner. Further investigation activities may be warranted based on the findings.

- 55-Gallon drums present on-Site should be removed from the Site and properly disposed of prior to Site construction activities, and documentation of their disposal should be maintained with a copy provided to CVS.

- On-Site drainage structures, including potential septic system components and/or storm water drainage structures (catch basins, etc.), that will not be reused as part of the Site redevelopment should be properly decommissioned according to local, state, and federal requirements. If evidence of contamination is identified during decommissioning of these structures, Ransom should be contacted to evaluate whether additional investigation or cleanup is warranted.

- Ransom recommends that miscellaneous chemicals, hazardous materials and/or stored appliances observed at the Site should be recovered/removed from the Site and properly disposed/recycled (by a certified technician where applicable) prior to proposed redevelopment activities.

## 10.0 DECLARATION OF ENVIRONMENTAL PROFESSIONAL

Primary Assessor and Report Author

This Phase I Environmental Site Assessment was conducted in general accordance with the requirements of ASTM International E 1527-13 by the undersigned. Any work completed on this Phase I Environmental Site Assessment by an individual who is not considered an environmental professional was completed under the supervision or responsible charge of the environmental professional(s) listed below.

Lauren Rojewski
Environmental Scientist/Primary Author

Environmental Professionals

We declare that, to the best of our professional knowledge and belief, we meet the definition of an Environmental Professional as defined in §312.10 of 40 CFR Part 312.

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Kimberly A. Skibo
Project Manager/Primary Reviewer

Brian R. Pettingill, P.G.
Senior Project Manager/CVS Program Manager

## 11.0 REFERENCES


1. City of Yonkers
   Ransom FOIL Submission: May 1, 2017
   City of Yonkers Housing and Building File Review: May 9, 2017

2. Westchester County
   Ransom FOIL Submission: May 1, 2017
   Westchester County Department of Health Response: May 10, 2017 and June 7, 2017

3. U.S. Geological Survey, Topographic 7.5–Minute Series Mount Vernon, New York, USGS Quadrangle, 2013.

4. EDR Radius Map with GeoCheck®, produced by Environmental Data Resources, Inc. of Shelton, Connecticut, dated April 29, 2017.

5. Certified Sanborn® Map Report, prepared by EDR, date April 29, 2017.

6. The EDR Aerial Photo Decade Package, prepared by EDR, dated April 29, 2017.

7. The EDR Historical Topographic Map Report, prepared by EDR, dated April 28, 2017.

8. The EDR City Directories, prepared by EDR, dated May 1, 2017.

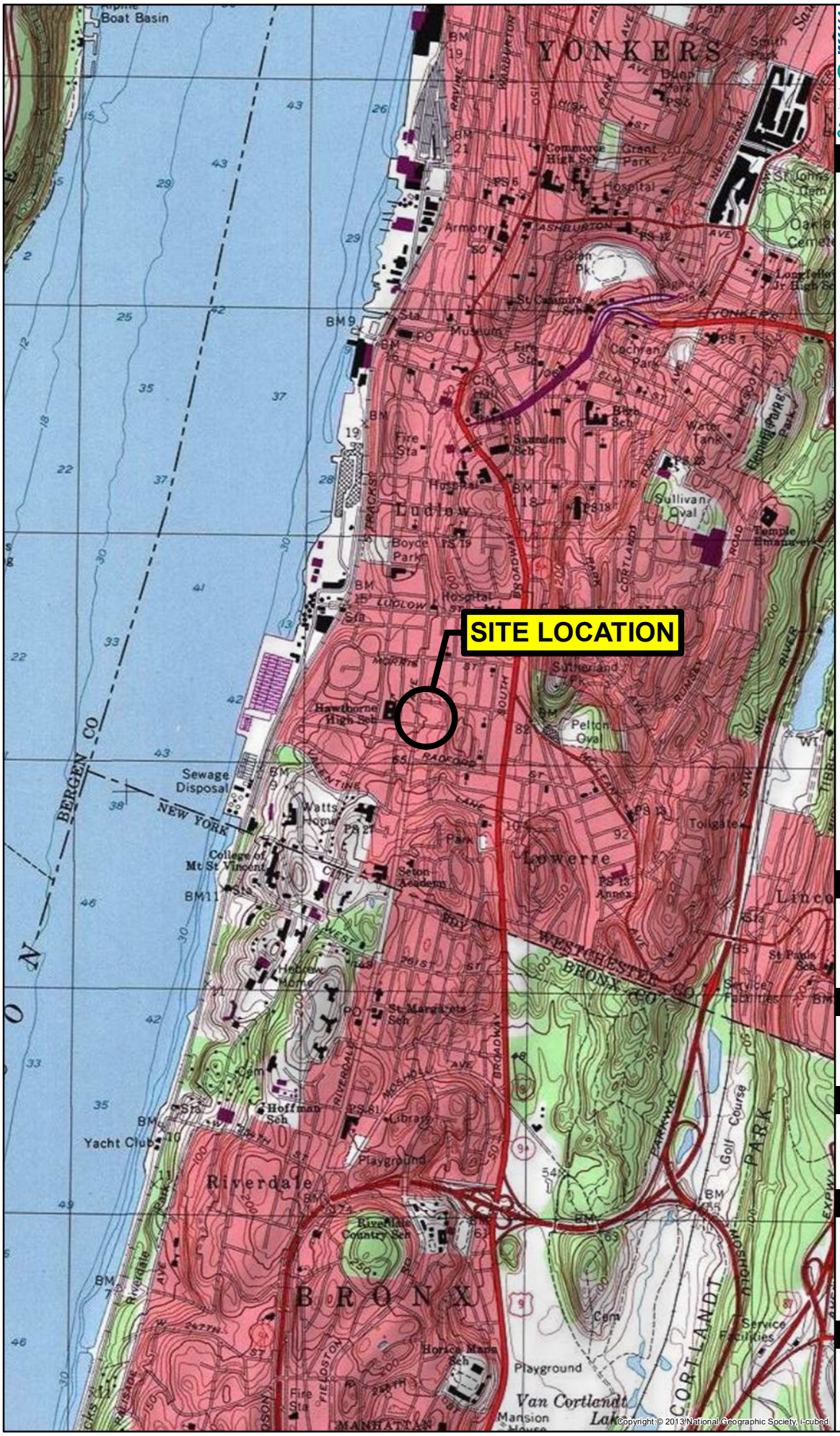
9. United States Army Corps of Engineers (USACE)
   Ransom FOIA Request: May 8, 2017
   USACE Response: May 9, 2017

10. USDA National Resources Conservation Service Web Soil Survey.
    http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

**APPENDIX A**

Site Location Map

Phase I Environmental Site Assessment
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York




RANSOM
Consulting Engineers and Scientists

## Regional Locator Map




Notes

1. Data Source: 2013 National Geographic Society, i-cubed
2. USGS Quad Name: Yonkers, New York
3. Latitude: 40°55'10.7"N
   Longitude: 73°54'02.9"W

## Scale and Orientation

0 1,000 2,000

1 inch = 2,000 feet

## Prepared For

CVS Pharmacy, Inc
One CVS Drive
Woonsocket, Rhode Island

## Prepared For

T.M. Crowley & Associates, Inc.
14 Breakneck Hill Road, Suite 101
Lincoln, Rhode Island 02865

## Site Address

Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

111.02013 | May 2017

# Figure 1

Site Location Map

PM File: CVS_YONKERS_NY-F1_SLM.mxd

**APPENDIX B**

Site Plan

Phase I Environmental Site Assessment
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York




RANSOM
Consulting Engineers and Scientists

## Legend & Notes

- Parcel Boundary
- Overhead Garage Door
- Stormwater Catch Basin
- Stormwater Line
- Former Fuel Oil Piping
- Hydraulic Oil Line
- Active Floor Drain
- Former Floor Drain
- Sealed Floor Drain
- Air Filter
- Hydraulic Lift Control Box
- Hydraulic Fluid Reservoir
- Compressor
- 55-Gallon Waste Oil Storage Drum
- Former 55-Gallon Waste Oil Drum Storage Area
- Hydraulic Lift (Single Post)
- Hydraulic Lift (Double Post)
- Former Residential Structure

Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation
2. Some features are approximate in location and scale
3. This plan has been prepared for CVS Pharmacy, Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

## Scale and Orientation

0 20 40
1 inch = 40 feet

## Prepared For

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island
02895-6146

## Prepared For

T.M. Crowley & Associates, Inc.
14 Breakneck Hill Road, Suite 101
Lincoln, Rhode Island 02865

## Site Address

Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

| 111.02013 | May 2017 |
|---|---|

Figure 2

Site Plan

File: CVS_YONKERS_NY.dwg Date: 05/19/2017

RANSOM Consulting, Inc.

Consulting Engineers and Scientists

August 15, 2017 Ransom Project No. R111.02013

CVS Pharmacy, Inc., its parent, affiliates and subsidiaries and their successors, assigns and grantees
c/o Ms. Shannon Parker
T.M. Crowley & Associates, Inc.
501 Pennsylvania Parkway, Ste. 160
Indianapolis, Indiana 46280

RE: Phase II Limited Subsurface Investigation
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

Dear Ms. Parker:

Ransom Consulting, Inc. (Ransom) is providing this letter to summarize the activities and results of a Phase II Limited Subsurface Investigation (LSI) conducted at the proposed CVS Pharmacy/Store site located at 13 Culver Street and 372 Riverdale Avenue, City of Yonkers, Westchester County, New York (i.e., the "Site"). A Site Location Map and a Site Plan are included as Figures 1 and 2, respectively.

Ransom conducted this Phase II LSI on behalf of T.M. Crowley & Associates Inc. (TMC) and CVS Pharmacy, Inc. (CVS), its parent, affiliates and subsidiaries and their successors, assigns, and grantees, and in accordance with Addendum 1 of an approved CVS Corporate Services Agreement, effective date April 1, 2017. The purpose of this Phase II LSI was to evaluate Recognized Environmental Conditions (RECs) identified in Ransom's Phase I Environmental Site Assessment (ESA) Report, dated June 7, 2017. The objectives of the Phase II LSI were to:

1. Perform a geophysical survey in an attempt to locate evidence of subsurface structures, including possible underground storage tanks (USTs), former UST excavation/backfill areas, product piping, possible septic tank systems, cesspools and/or drywells, and other potential subsurface structures associated with RECs around the current and former Site Buildings;

2. Assess current soil and groundwater conditions at the Site relative to documented or suspected releases of hazardous substances or petroleum products (HSP) at the Site, and in the immediate vicinity of the Site, which were identified as RECs in our June 7, 2017 Phase I ESA; and

3. Evaluate potential impacts to the proposed redevelopment by CVS, including potential risks to Site occupants, construction workers and to the indoor air quality of the proposed CVS building, and increased costs related to managing contaminated soil and/or

groundwater, or potentially implementing vapor mitigation measures during the proposed redevelopment activities, if necessary.

## SITE DESCRIPTION AND BACKGROUND

The Site is located in the northeast corner of the intersection of Riverdale Avenue and Culver Street in the City of Yonkers, Westchester County, New York (i.e., the "Site"), which includes Section 1, Block 129, Lots 26 and 30,. The Site, which totals approximately 1.01 acres, is improved with an approximately 8,695 square-foot commercial structure (the "Lot 30 Site Building") used for automotive repair and sales operations and an approximately 1,320 square-foot residential structure (the "Lot 26 Residential Building") (collectively, the "Site Buildings"). The Site is located in a mixed commercial and residential area of the City of Yonkers.

The Lot 30 portion of the Site operated as a Goodyear-branded automotive repair shop and tire sales center from 1974 until sometime in 2015. The Lot 30 Site Building and surrounding paved parking areas are currently occupied by the West Coast Auto Sales company, who have utilized the Site for the sale of used cars since sometime in 2016. The Lot 30 Site Building is also currently being utilized by individual tenants for automotive repair and service operations, and vehicle painting operations as well. The Lot 26 Residential Building was constructed sometime prior to 1897 and has been vacant since sometime in 2009. Prior to the development of the Lot 30 Site Building in 1974, the entire Site consisted of ten residential structures, one of which was removed by 1951, and six of which were removed circa 1973. Commercial improvements (i.e., an additional parking area) to the Lot 30 portion of the Site were completed in June 1980, at which time two more residential structures were removed from the Site.

Properties to the north of the Site currently consist of residential properties. The property to the east of the Site consists of Culver Park. The PEARLS Hawthorne School is located to the west of the Site, across Riverdale Avenue. To the south of the Site, across Culver Street, is a Citgo-branded gasoline filling station and residential properties. Further south of the Citgo-branded gasoline filling station is the Devonshire Discount Tire, Auto Body, and Repair Center.

Ransom's Phase I ESA report, dated June 7, 2017, identified the following Recognized Environmental Conditions (RECs) for which further investigation was recommended:

- REC 1 – Automotive Repair Drainage System:
    - REC 1A – Service Garage Sealed Floor Drain;
    - REC 1B – Boiler Room Sealed Floor Drain;
    - REC 1C – Parts Room Sealed Floor Drain;
    - REC 1D – Bathroom Floor Drains;
    - REC 1E – Employee Locker Room Sealed Floor Drain;
    - REC 1F – Tire Wash Area Floor Drain;
    - REC 1G – Former Hydraulic Lift Floor Drains; and
    - REC 1H – Former Grease and Sand Interceptor.
- REC 2 – Automotive Repair Hydraulic Lift Systems:

  - REC 2A – Hydraulic Lifts and Alignment Rack;
  - REC 2B – Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes;
  - REC 2C – Former Hydraulic Lifts, Air/Hydraulic Alignment Rack and Underground Hydraulic Oil Reservoirs;
  - REC 2D – Hydraulic Lift Control Boxes; and
  - REC 2E – Former Air Compressors.
- REC 3 – Vehicle Storage;
- REC 4 – Inactive Oil-Fired Boiler System;
- REC 5 – Former 3,000-gallon Fuel Oil UST;
- REC 6 – Former 550-gallon Waste Oil UST;
- REC 7 – 55-Gallon Waste Oil Drum Storage;
- REC 8 – Current/Former Residential Use:
  - REC 8A – Known Fuel Oil Use at Residential Building; and
  - REC 8B – Former Residential Use.
- REC 9 – Potential Fill; and
- REC 10 – Potential Off-Site Sources:
  - REC 10A – Off-Site Citgo Service Station;
  - REC 10B – Off-Site Devonshire Discount Tire, Auto Body & Repair Center; and
  - REC 10C – Former Riverdale Auto Service Inc.

Based on the findings and conclusions presented above, Ransom made the following recommendations in our Phase I ESA to address the above RECs:

- Ransom recommended that sub-slab soil samples be collected along the drainage pipes and on-Site sanitary sewer lines associated with the automotive repair floor drains (REC 1). In an effort to target potential heavily impacted areas, video inspection of the pipes for evidence of cracks or breaches was recommended as part of the geophysical survey recommended below. Based on the findings of the video inspection, soil sampling would be biased towards those areas of pipe cracks/breaches.
- Ransom recommended the completion of a geophysical survey across the Site in an effort to: (1) confirm the removal of the 3,000-gallon fuel oil UST (REC 5) and 550-gallon waste oil UST (REC 6) presumably removed from the Site in 1995; and (2) assess if historic USTs, former product piping, and/or septic tanks are present from the current/former residential use (REC 8). If anomalies are identified, further subsurface investigation may be warranted.
- A subsurface soil and groundwater investigation was recommended prior to the initiation of construction activities. Ransom recommended the following soil and groundwater monitoring program be completed prior to redevelopment activities:

  - Ransom recommended the collection of sub-slab soil and groundwater samples from beneath the current/former hydraulic lifts and one hydraulic alignment rack (RECs 2A and REC 2C) within the Lot 30 Site Building.
  - Ransom recommended the collection of sub-slab soil samples from beneath the five-identified wall-mounted hydraulic fluid reservoirs (REC 2B) within the Lot 30 Site Building immediately adjacent to the exposed subsurface piping.
  - Ransom recommended the collection of sub-slab soil samples immediately adjacent to the three floor-mounted control boxes (REC 2D) within the Lot 30 Site Building.
  - Ransom recommended the collection of subsurface soil and groundwater samples in the locations of the former 3,000-gallon fuel oil UST (REC 5) and 550-gallon waste oil UST (REC 6).
  - Ransom recommended the collection of subsurface soil samples at the location of the crack observed near the former waste oil drum storage/staining (REC 7).
  - Ransom recommended the collection of subsurface soil samples at the location of the potential historical fill area (REC 9).
  - Ransom recommended the installation of temporary groundwater monitoring points and/or soil borings along the southern boundary of the Site to evaluate potential off-Site impacts to the Site (REC 10).

- Since there were physical obstructions (e.g., stored vehicles, dirt, welded doors, etc.), which represented a significant data gap, and based on historical operations, Ransom recommended the physical obstructions be removed and further inspection completed of the ground surface areas beneath the former air compressor (REC 2E), the stored vehicles (REC 3), the inactive oil-fired burner (REC 4) and potential residential fuel-oil fired boiler (REC 8). Further investigative activities may be warranted based on the findings.
- Ransom recommended the proper disposal of the fuel oil-fired burner and its contents (e.g., waste ash) (REC 8) identified within the Lot 30 Site Building. After removal, Ransom recommended further inspection of the surface areas beneath the fuel oil-fired burner. Further investigative activities may be warranted based on the findings.
- The 55-gallon drums present on-Site should be removed from the Site and properly disposed of prior to Site construction activities, and documentation of their disposal should be maintained with a copy provided to CVS.
- On-Site drainage structures, including potential septic system components and/or storm water drainage structures (catch basins, etc.), that will not be reused as part of the Site redevelopment should be properly decommissioned according to local, state, and federal requirements. If evidence of contamination is identified during decommissioning of these structures, Ransom should be contacted to evaluate whether additional investigation or cleanup is warranted.
- Ransom recommended that miscellaneous chemicals, hazardous materials and/or stored appliances observed at the Site should be recovered/removed from the Site and properly disposed/recycled (by a certified technician where applicable) prior to proposed redevelopment activities.

A copy of the REC plan is included as Figure 3.

## PHASE II LIMITED SUBSURFACE INVESTIGATION

Geophysical Investigation and Subsurface Floor Drain Imaging

Between June 27 and June 29, 2017, Advanced Geological Services (AGS) of Malvern, Pennsylvania performed a geophysical survey at the Site. The purpose of the geophysical survey was to identify and locate evidence of subsurface structures, including, but not limited to, current on-Site USTs, former on-Site USTs, and/or former UST excavation/backfill area(s), product piping, septic tank systems, cesspools and/or drywells, former and/or current drain systems, and foundations or former foundation areas associated with the former Site structure(s). Proposed drilling locations on both the Lot 26 and Lot 30 portions of the Site were cleared of identifiable drilling hazards (i.e., subsurface utilities, etc.) at this time as well. The proposed drilling locations were adjusted to avoid any identified hazards, where necessary, with the approval of Ransom. Additionally, an effort was made to complete imaging and evaluation of piping associated with the two identified floor drains within the former Goodyear Automotive Service Center building to evaluate for breaches within the piping.

The geophysical survey was conducted using a combination of ground penetrating radar (GPR), radio frequency (RF), hand-held electromagnetic (HHEM), and/or multi-frequency electromagnetic meter (EM). The geophysical investigation area consisted of the asphalt parking lot surrounding the Lot 30 Site Building, the interior of the Lot 30 Site Building, and exterior surface areas on the Lot 26 portion of the Site. The following anomalies/features were identified during the geophysical investigation activities:

- A backfilled excavation (presumably from the former 500-gallon UST) was identified near the southeast corner of the Lot 30 Site Building. An associated vent pipe (visible at the southeast corner of the building) was identified as extending to the edge of the excavation; and

- A suspect UST was located on the east side of the Lot 30 Site Building, near the northeast corner. This feature produced an EM response with the hand-held EM metal detection instrument and also an ambiguous GPR response. A vent pipe located on the building wall and a potential supply/return line were also identified leading from the building to the suspect UST location. The geophysical results at this location were not conclusive; therefore, AGS recommended that additional direct investigation of this location, such as excavation, be considered to determine the presence of a UST at this location.

Geophysical survey activities conducted identified evidence of one suspect UST on Lot 30. The identified metallic anomaly measured approximately 6 feet in width by 16 feet in length, corresponding to an UST with an approximate volume between 3,000 and 4,000 gallons. The top of the UST was estimated to be approximately 4 to 5 feet bgs. Based on the size and location of this suspect UST, it is presumably associated with the closed (i.e., abandoned-in-place) 3,000-gallon heating oil UST (REC 5) associated with the Lot 30 Site Building. Geophysical survey activities conducted did not identify evidence of a current or former UST associated with the Lot 26 Residential Building. GPR results also suggested that fill or building rubble may be present throughout the Site.

The geophysical survey activities encountered several limitations, including the presence of parked/immovable vehicles within the interior vehicle storage area of the Lot 30 Site Building, the presence of parked/immovable vehicles along the southwestern, northern, and eastern boundaries of the Lot 30 portion of the Site, and the presence of steel reinforcing bar embedded within the concrete slab foundation of the Lot 30 Site Building. Based on the EM results and visual observations at the Site,

Ransom believes that these limitations do not warrant further investigation; however, due to these geophysical survey limitations, further response actions may be warranted during Site redevelopment if subsurface structures are identified.

Also during the geophysical event, attempts were made to access the floor drain system located inside of the south side of the Lot 30 Site Building. The camera was inserted into the clean-out located inside of the southeast corner of the building. However, there was a wire trap approximately 5-feet beyond the clean-out opening that prevented access. Attempts were made to access the drain system through three other clean-outs located along the length of the floor drain inside the south side of the building, but they were all filled with sediments preventing access. Due to Site conditions, it was not possible to inspect the floor drain system that extends from east to west inside the south side of the auto shop area.

The geophysical summary report is included as Appendix A, where Figure 1 of Appendix A shows the color contoured EM results from accessible areas of the Site. The report also shows the areas of the Site where limitations to the geophysical existed, including where cars were parked, and where portions of the Site were covered with reinforced concrete.

Subsurface Investigation

This section summarizes the investigation activities completed by Ransom, including soil boring installation and sampling and the installation of temporary monitoring well points to evaluate the potential environmental impacts to the Site from the identified RECs.

**Soil Boring and Temporary Monitoring Well Sampling Program**

Ransom conducted a soil boring investigation at the Site on June 27, 28, and 29, 2017. A total of 25 borings (SB-1 through SB-25) were advanced at the Site. Ransom advanced these borings concurrently with our Geotechnical Engineering Evaluation conducted at the Site (borings B101 through B108). The Geotechnical report has been provided separately. Soil boring locations are depicted on Figure 4. Soil borings were advanced by Environmental Probing Investigations, Inc. (EPI) of Cream Ridge, NJ utilizing direct push Geoprobe® technology with acetate-lined macro-core samplers. The soil boring depths ranged from 3.0 to 30 feet below grade surface (bgs). Subsurface explorations generally encountered brown and tan silt with trace fine sand to approximately 8 feet bgs and brown and tan fine to medium sands between approximately 8 feet bgs and 20 feet bgs. Fill material, including brick and coarse gravel, was encountered within four soil borings (SB-14, SB-21, SB-22, and SB-24) at depths ranging between 0.5 and 4.0 feet bgs. Also, during geotechnical drilling, refusal (i.e., the depth below which the hollow-stem auger was not able to penetrate the deeper geologic formations) was encountered in two of the Site borings at depths of approximately 7 and 17 feet below existing grades (B105 and B103, respectively, see Figure 4). Rock coring was not conducted to confirm the drilling refusal surfaces. It is our opinion that the shallow refusal in B103 was on a large boulder or buried foundation stone, and not on bedrock. The deeper drilling refusal in B105 was likely at the top of competent bedrock.

A total of 30 soil samples were collected from corresponding soil borings (SB-1 through SB-25) at six-inch intervals ranging from 0.5 to 9.0 feet bgs. Soil samples were not collected from soil borings SB-4 and SB-5 due to encountering drilling refusal and/or underground utilities at these locations. Soils within each boring were observed for visual and olfactory evidence of impacts. Petroleum odors were observed within one soil boring (SB-23) at an approximate depth range of 3.5 to 4.0 feet bgs; however, no staining was observed within the soil borings advanced at the Site. Additionally, a photoionization detector (PID)

was utilized to screen the soil for the presence of volatile organic vapors. Field screening of the soil borings identified elevated PID readings within one soil boring, SB-23, ranging from 3.2 to 6.8 parts per million (ppm) at an approximate depth of 3.0 to 6.5 feet bgs. Soil boring logs are provided as Appendix B.

Additionally, eight test borings (B101 through B108) were advanced at the Site as part of the geotechnical evaluation activities. The geotechnical borings were advanced using hollow-stem auger drilling techniques with slit-barrel sampling and standard penetration testing (SPT, ASTM D 1586). Representative soil samples (B101 through B108) were placed in sealed containers and returned to Ransom's office for further evaluation and laboratory testing. Soil samples were classified in general accordance with visual-manual procedures (ASTM D 2488). Geotechnical sampling results and associated geotechnical logs will be presented within a project geotechnical report under a separate cover that will contain recommendations and design parameters.

Soil samples were collected and sent to Hampton Clarke Laboratories (Hampton-Clarke) of Fairfield, New Jersey to be analyzed for a Targeted Compound List of Volatile Organic Compounds (TCL/CP-51 VOCs) in accordance with the New York State Department of Environmental Conservation (NYSDEC) CP-51 Soil Cleanup Guidance via United States Environmental Protection Agency (USEPA) Method 8260, a Targeted Compound List of Semi-Volatile Organic Compounds (TLC/CP-51 SVOCs) in accordance with the NYSDEC CP-51 Soil Cleanup Guidance, Polychlorinated Biphenyls (PCBs) via USEPA Method 8082, Polycyclic Aromatic Hydrocarbons (PAHs) via USEPA Method 8270, the Target Analyte List of Metals (TAL Metals) via USEPA Methods 6010/6020, and/or a Targeted Compound List of Pesticides (TCL Pesticides) via USEPA Method 8081. Additionally, one composite sample was collected from soil boring SB-24 for preliminary waste characterization purposes and was analyzed for VOCs with a forward library search for up to fifteen additional compounds (VOCs+15) via USEPA Method 8260, SVOCs with a forward library search for up to fifteen compounds (SVOCs+15) via USEPA Method 8270, PCBs via USEPA Method 8082, Organochlorine Pesticides via USEPA Method 8081, TAL Metals via USEPA Method 6010/6020, and Cyanide via USEPA Method 9012B. Soil sampling analytical results are summarized on Table 1, and soil analytical results exceeding applicable NYSDEC Soil Cleanup Objectives (SCOs) are illustrated on Figure 5A and Figure 5B. The following soil sampling analytical program was followed for the Phase II LSI activities and previously identified RECs:

| Sample ID | Date | REC(s) | Analysis |
|---|---|---|---|
| SB-1 | 6/27/2017 | REC 1H | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, and TAL Metals |
| SB-2 | 6/29/2017 | REC 1 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, and TAL Metals |
| SB-3 | 6/27/2017 | REC 1 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, and TAL Metals |
| SB-6A | 6/29/2017 | REC 2B | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-6B | 6/29/2017 | REC 2A and REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-7 | 6/27/2017 | REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-8A | 6/27/2017 | REC 2B | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-8B | 6/27/2017 | REC 2A and REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-9A | 6/27/2017 | REC 2B | TCL/CP-51 VOCs, PCBs, and PAHs |

| Sample ID | Date | REC(s) | Analysis |
|---|---|---|---|
| SB-9B | 6/27/2017 | REC 2A and REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-10 | 6/27/2017 | REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-11A | 6/27/2017 | REC 2B | TCL/CP-51 VOCs, PAHs, and PCBs |
| SB-11B | 6/27/2017 | REC 2A and REC 2C | TCL/CP-51 VOCs, PAHs, and PCBs |
| SB-12 | 6/27/2017 | REC 2A and REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-13A | 6/27/2017 | REC 2B | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-13B | 6/27/2017 | REC 2A and REC 2C | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-14A | 6/29/2017 | REC 2D | TCL/CP-51 VOCs and PAHs[1] |
| SB-14B | 6/29/2017 | REC 2D/REC 9 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, TAL Metals, and PCBs |
| SB-15 | 6/27/2017 | REC 2D | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-16 | 6/27/2017 | REC 2D | TCL/CP-51 VOCs, PCBs, and PAHs |
| SB-17 | 6/28/2017 | REC 5 | TCL/CP-51 VOCs and PAHs |
| SB-18 | 6/28/2017 | REC 6 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, TAL Metals, and PCBs |
| SB-19 | 6/27/2017 | REC 7 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, and TAL Metals |
| SB-20 | 6/28/2017 | REC 8A | TCL/CP-51 VOCs and PAHs |
| SB-21 | 6/28/2017 | REC 9 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, TAL Metals, PCBs, and TCL Pesticides |
| SB-22 | 6/27/2017 | REC 10 and REC 9 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, and TAL Metals |
| SB-23 | 6/28/2017 | REC 10 | TCL/CP-51 VOCs, PAHs, and TAL Metals |
| SB-24 | 6/29/2017 | REC 9 | TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, TAL Metals, and TCL Pesticides |
| SB-24C | 6/29/2017 | Preliminary Waste Characterization | TCL/CP-51 VOCs,+15 TCL/CP-51 SVOCs+15, TCL Pesticides, PCBs, TAL Metals, and Cyanide |
| SB-25 | 6/29/2017 | REC 2E and REC 11* | TCL/CP-51 VOCs, PCBs, PAHs, and TAL Metals |

*During Phase II LSI drilling activities, it was observed that the backroom was being utilized as a Vehicle Paint Shop (REC 11); therefore, this activity was added to the Site's REC list as REC 11, and one sample was collected concurrently with the REC 2E (former air compressors) soil sample.

Following soil boring and sampling activities, two soil borings (SB-23 and SB-22) were converted into temporary well points (TWPs) (TWP-1 and TWP-2, respectively). The TWPs were constructed with 1-inch diameter PVC 0.010-inch slotted screen and solid riser to depths ranging from 18.50 to 19.75 feet bgs. The two TWP locations are depicted on Figure 4, groundwater sampling analytical results are

[1] The PAH analysis was run out of hold time due to a recording error at one soil sample (SB-14A). Since this analytical parameter was only four of days out of hold time, this analysis may not represent worst-case scenario results, but can indicate if there is a potential for PAH-impacted soil; therefore, it can be utilized for the purposes of this Phase II LSI.

summarized on Table 2, and groundwater analytical results exceeding NYSDEC Ambient Water Quality Standards (AWQS) are depicted on Figure 6. Temporary well point TWP-1 was gauged and sampled on June 28, 2017, and TWP-2 was gauged and sampled on June 29, 2017. Groundwater was encountered in the temporary well points at an approximate depth of 8.0 feet bgs. Temporary well point logs are included as Appendix B. Groundwater samples were collected and submitted to Hampton-Clarke of Fairfield, New Jersey for analysis of TCL/CP-51 VOCs via USEPA Method 8260, TCL/CP-51 SVOCs via USEPA Method 8270, and Lead via USEPA Method 6020.

Following sampling, the borings were backfilled with the soil cuttings and bentonite hole plug to grade.

**Applicable Soil and Groundwater Regulatory Standards**

The applicable NYSDEC remediation standards for the soil and groundwater analytical results at the Site are as follows:

Soil: 6 NYCRR Part 375 (Tables 375-6.8(a) and (b), Effective December 14, 2006):
Unrestricted Use Soil Cleanup Objectives (SCOs)
Residential Use SCOs
Restricted-Residential SCOs
Commercial Use SCOs
Industrial Use SCOs
Protection of Ecological Resources SCOs
Protection of Groundwater SCOs

Groundwater: 6 NYCRR Part 703 (Table 1, reissued June 1998) and Draft Ambient Water Quality Standards, Guidance Values and Groundwater Effluent Limitations (Table 1, drafted November 1999):
Ambient Water Quality Standards (AWQS)

An account of the soil sampling activities is discussed below, and the laboratory data reports are included in Appendix C. Soil sampling analytical results are summarized on Table 1, and groundwater sampling analytical results are summarized on Table 2.

**REC 1 – Automotive Repair Drainage System**

*REC 1A – Service Garage Sealed Floor Drain // REC 1G – Former Hydraulic Lift Floor Drains // REC 1H – Former Grease and Sand Interceptor – Soil Sampling and Analytical Results*

A total of three soil borings (SB-1, SB-2, and SB-3) were advanced to a maximum depth of five feet bgs in the vicinity of the service garage sealed floor drains, former hydraulic lift floor/trench drains, and the former grease and sand interceptor identified within the Lot 30 Site Building for assessment of the former automotive repair drainage system. Field screening of the soil borings did not identify elevated PID readings. In the absence of field evidence of impacts, one soil sample was collected between 3.0 to 3.5 feet bgs, the presumed invert of the former grease and sand interceptor, from soil boring SB-1; and one soil sample was collected from both SB-2 and SB-3 between 0.5 to 1.0 feet bgs, the presumed invert of the former drainage systems. Soil samples SB-1 through SB-3 were analyzed for TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, and TAL Metals. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-1

- Barium, at a concentration of 360 milligrams per kilogram (mg/kg), exceeded the Unrestricted Use SCO (350 mg/kg) and the Residential Use SCO (350 mg/kg);
- Total chromium, at a concentration of 78 mg/kg, exceeded the Unrestricted Use SCO for trivalent chromium (30 mg/kg) and hexavalent chromium (1 mg/kg), Residential Use SCO for trivalent chromium (36 mg/kg) and hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for trivalent chromium (41 mg/kg) and hexavalent chromium (1 mg/kg), and the Protection of Groundwater Use SCO for hexavalent chromium (19 mg/kg);
- Copper, at a concentration of 69 mg/kg, exceeded the Unrestricted Use SCO (50 mg/kg) and the Protection of Ecological Resources SCO (50 mg/kg);
- Lead, at a concentration of 620 mg/kg, exceeded the Unrestricted Use SCO (63 mg/kg), the Residential Use SCO (400 mg/kg), the Restricted Residential Use SCO (400 mg/kg), the Protection of Ecological Resources SCO (63 mg/kg), and the Protection of Groundwater SCO (450 mg/kg);
- Total mercury, at a concentration of 0.8 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater SCO (0.73 mg/kg); and
- Zinc, at a concentration of 410 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg).

Soil Sample SB-2

- Copper, at a concentration of 61 mg/kg, exceeded the Unrestricted Use SCO (50 mg/kg) and the Protection of Ecological Resources SCO (50 mg/kg);
- Lead, at a concentration of 520 mg/kg, exceeded the Unrestricted Use SCO (63 mg/kg), the Residential Use SCO (400 mg/kg), the Restricted Residential Use SCO (400 mg/kg), the Protection of Ecological Resources SCO (63 mg/kg), and the Protection of Groundwater SCO (450 mg/kg);
- Total chromium, at a concentration of 23 mg/kg, exceeded the Unrestricted Use SCO for hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);
- Total mercury, at a concentration of 1.9 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Residential Use SCO (0.81 mg/kg), the Restricted Residential Use SCO (0.81), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater SCO (0.73 mg/kg); and
- Zinc, at a concentration of 300 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg).

Soil Sample SB-3

- Total chromium, at a concentration of 17 mg/kg, exceeded the Unrestricted Use SCO for hexavalent chromium (1 mg/kg) and the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory reporting limits (RLs) or were detected at concentrations below the most stringent NYSDEC SCOs.

## REC 2 – Automotive Repair Hydraulic Lift Systems

*REC 2A – Hydraulic Lifts and Alignment Rack // REC 2B – Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes // REC 2C – Former Hydraulic Lifts, Air/Hydraulic Alignment Rack and Underground Hydraulic Oil Reservoirs – Soil Sampling and Analytical Results*

A total of eight soil borings (SB-6 through SB-13) were advanced to a maximum depth of 10 feet bgs in the vicinity of the existing hydraulic lifts and alignment rack, the wall-mounted hydraulic fluid reservoirs/control boxes, the former hydraulic lift system locations, and underground hydraulic oil reservoirs for assessment of the current and former hydraulic lift systems. Field screening of the soil borings did not identify elevated PID readings. In the absence of field evidence of impacts, one soil sample was collected from soil borings SB-7, SB-10, and SB-12 between 8.0 to 9.0 feet bgs, the presumed invert of the former hydraulic lift fluid reservoirs/alignment rack housing. Additionally, two samples were collected per boring location for soil borings SB-6, SB-8, SB-9, SB-11, and SB-13 between 0.5 to 1.0 feet bgs and 8.0 to 8.5 feet bgs to evaluate for impacts related to the wall mounted hydraulic fluid reservoirs as well as the current and former hydraulic lifts and underground fluid reservoirs, respectively. Soil samples were chemically analyzed for TCL/CP-51 VOCs, PAHs, and PCBs. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-9A[2]

- Benzo(a)pyrene, at a concentration of 1.2 mg/kg, exceeded the Industrial Use SCO (1.1 mg/kg); however, the concentration of 1.2 mg/kg was rounded to the number of significant digits (i.e., one) for Unrestricted Use SCO (1 mg/kg), the Residential Use SCO (1 mg/kg), the Restricted Residential Use SCO (1 mg/kg), and the Commercial Use SCO (1 mg/kg); therefore, the analytical result of 1.2 mg/kg was rounded to 1 mg/kg, which meets these NYSDEC SCOs;
- Benzo(b)fluoranthene, at a concentration of 1.7 mg/kg, exceeded the Unrestricted Use SCO (1 mg/kg), the Residential Use SCO (1 mg/kg), and the Restricted Residential Use SCO (1 mg/kg); and
- Indeno(1,2,3-cd)pyrene, at a concentration of 0.74 mg/kg, exceeded the Unrestricted Use SCO (0.5 mg/kg), the Residential Use SCO (0.5 mg/kg), and the Restricted Residential Use SCO (0.5 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

*REC 2D – Hydraulic Lift Control Boxes – Soil Sampling and Analytical Results*

A total of three soil borings (SB-14, SB-15, and SB-16) were advanced to a maximum depth of five feet bgs in the vicinity of the hydraulic lift control boxes identified within the Lot 30 Site Building for assessment of potential impacts related to the identified hydraulic lift control boxes. SB-14 was completed within a heavily stained area of concrete, where potential breaching around the control box

[2] Benzo(a)anthracene and chrysene were detected with a concentration of 1.3 mg/kg and 1.2 mg/kg, respectively; therefore, the analytical results of 1.3 mg/kg and 1.2 mg/kg were rounded to the number of significant digits (i.e., one) of the applicable standard for benzo(a)anthracene and chrysene (i.e., the NYSDEC's Unrestricted Use SCO of 1 mg/kg); therefore, the analytical results of 1.3 mg/kg and 1.2 mg/kg were rounded to 1 mg/kg, which meets the applicable the NYSDEC's Unrestricted Use SCO.

was evident. Field screening of the soil borings did not identify elevated PID readings. In the absence of field evidence of impacts one soil sample was collected at each boring location between 0.5 to 1.0 feet bgs, the presumed invert of the hydraulic lift control box piping infrastructure, with the exception of soil sample SB-14B, which was collected between 1.5 to 2.0 feet bgs. Soil samples were analyzed for TCL/CP-51 VOCs, TCL/CP-51 SVOCs, TAL Metals, and PCBs for this REC. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-14B

- Total aroclor, at a concentration of 0.16 mg/kg, exceeded the Unrestricted Use SCO (0.1 mg/kg);
- Cadmium, at a concentration of 3.7 mg/kg, exceeded the Unrestricted Use SCO (2.5 mg/kg) and the Residential Use SCO (2.5 mg/kg);
- Total chromium, at a concentration of 36 mg/kg, exceeded the Unrestricted Use SCO for trivalent chromium (30 mg/kg) and hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);
- Copper, at a total concentration of 4,900 mg/kg, exceeded the Unrestricted Use SCO (50 mg/kg), the Residential Use SCO (270 mg/kg), the Restricted Residential Use SCO (270 mg/kg), the Commercial Use SCO (270 mg/kg), the Protection of Ecological Resources SCO (50 mg/kg), and the Protection of Groundwater Use SCO (450 mg/kg);
- Total mercury, at a concentration of 3 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Residential Use SCO (0.81 mg/kg), the Restricted Residential Use SCO (0.81 mg/kg), the Commercial Use SCO (2.8 mg/kg), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater Use SCO (0.73 mg/kg); and
- Zinc, at a total concentration of 580 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources Use SCO (109 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

*REC 2E – Former Air Compressors and REC 11 – Vehicle Painting Operations – Soil Sampling and Analytical Results*

One soil boring (SB-25) was advanced to a maximum depth of five feet bgs in the vicinity of the former air compressor locations identified within the Lot 30 Site Building where moderate staining on the flooring beneath the former air compressor was observed to evaluate for potential impacts related to former service station operations. Since vehicle painting operations were also conducted within the vicinity of this area, SB-25 was also used to evaluate these ongoing activities as well. Field screening of the soil boring did not identify elevated PID readings. In the absence of field evidence of impacts, one soil sample was collected from boring location SB-25 between 0.5 to 1.0 feet bgs, just below the concrete slab of the Lot 30 Site Building. Soil sample SB-25 was analyzed for TCL/CP-51 VOCs, PCBs, PAHs, and TAL Metals. Analytical results identified the following exceedances of the NYSDEC SCOs:

Soil Sample SB-25

- Total chromium, at a concentration of 32 mg/kg, exceeded the Unrestricted Use SCO for trivalent chromium (30 mg/kg) and hexavalent chromium (1 mg/kg), the Residential Use SCO

for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);

- Lead, at a concentration of 260 mg/kg, exceeded the Unrestricted Use SCO (63 mg/kg) and the Protection of Ecological Resources SCO (63 mg/kg);
- Total mercury, at a concentration of 0.25 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg) and the Protection of Ecological Resources SCO (0.18 mg/kg); and
- Zinc, at a concentration of 120 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

**REC 3 – Vehicle Storage – Investigation Results**

Ransom identified several areas utilized for the storage of used vehicles in relation to the automotive sales and repair operations at the Site during the June 2017 Phase I ESA activities. Vehicle storage areas were identified within the northeastern most portion of the Lot 30 Site Building as well as along the paved parking areas of the Lot 30 portion of the Site. Ransom conducted a visual inspection of the surface areas beneath the parked vehicles during the Phase II LSI activities conducted between July 27, 2017 through July 29, 2017. No evidence of cracks, breaches, or apparent impacts were identified during investigation activities; therefore, no soil samples were collected and vehicle storage is no longer considered a REC.

**REC 4 – Inactive Oil-Fired Burner – Investigation Results**

Ransom was unable to complete subsurface soil investigation activities in the vicinity of the in-active oil-fired burner during the Phases II LSI activities due to the presence of underground utilities in this area; therefore, a soil sample could not be collected representative of potential impacts at REC 4. Visual inspection of the surface conditions in the vicinity of the inactive oil-fired burner did not identify breaches within the concrete slab; however, a significant layer of dust/potential waste ash was noted.

**REC 5 – Former 3,000-gallon Fuel Oil UST – Soil Sampling and Analytical Results**

Geophysical survey activities conducted on June 28, 2017 identified one subsurface metallic anomaly indicative of an UST in the presumed location of the former 3,000-gallon fuel oil UST, located on the northeast side of the Lot 30 Site Building. One soil boring, SB-17, was advanced down-gradient (i.e., to the northwest) of the identified metallic anomaly/presumed 3,000-gallon fuel oil UST to evaluate potential impacts associated with this UST. Field screening of the soil boring did not identify elevated PID readings; additionally, no odors and/or staining were observed in the soil boring. Soil sample SB-17 was collected between 8.0 to 8.5 feet bgs, the presumed invert of the former 3,000-gallon fuel oil UST, and analyzed for TCL/CP-51 VOCs and PAHs. All analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the NYSDEC's most stringent SCOs.

**REC 6 – Former 550-gallon Waste Oil UST – Soil Sampling and Analytical Results**

Geophysical survey activities conducted on June 28, 2017 did not identify a subsurface anomaly indicative of an UST in the presumed location of the former 550-gallon waste oil UST, located on the southeast exterior corner of the Lot 30 Site Building.

One soil boring, SB-18, was advanced in the location of the former 550-gallon waste oil UST to evaluate potential impacts associated with this former UST. Field screening of the soil boring did not identify elevated PID readings; additionally, no odors and/or staining were observed in the soil boring. In the absence of field evidence of impacts, soil sample SB-18 was collected between 7.0 to 7.5 feet bgs, the approximate depth of the invert of the former UST, and was analyzed for TCL/CP-51 VOCs, TCL/CP-51 SVOCs, TAL Metals, and PCBs. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-18

- Total chromium, at a concentration of 31 mg/kg, exceeded the Unrestricted Use SCO for trivalent chromium (30 mg/kg) and hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg); and
- Manganese, at a concentration of 1,800 mg/kg, exceeded the Unrestricted Use SCO (1,600 mg/kg) and the Protection of Ecological Resources SCO (1,600 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

**REC 7 – 55-gallon Waste Oil Drum Storage – Soil Sampling and Analytical Results**

One soil boring, SB-19, was advanced to a maximum depth of five feet bgs in the vicinity of the identified staining and a breach in the concrete floor within the service garage area of the Lot 30 Site Building, associated with the former storage of 55-gallon drums, to evaluate for potential impacts related to the presumed storage/disposal of waste oil. Field screening of the soil boring did not identify elevated PID readings; in addition, no evidence of odors and/or staining were observed in the soil boring. In the absence of field evidence of impacts, one soil sample was collected between 0.5 to 1.0 feet bgs, directly beneath the concrete slab foundation breach of the Lot 30 Site Building. Soil sample SB-19 was analyzed for TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, and TAL Metals. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-19

- Lead, at a concentration of 130 mg/kg, exceeded the Unrestricted Use SCO (63 mg/kg) and the Protection of Ecological Resources SCO (63 mg/kg);
- Total chromium, at a concentration of 13 mg/kg, exceeded the Unrestricted Use SCO for hexavalent chromium (1 mg/kg) and the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg); and
- Total mercury, at a concentration of 0.33 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg) and the Protection of Ecological Resources SCO (0.18 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

**REC 8 – Current/Former Residential Use**

*REC 8A – Current Residential Use – Geophysical Survey Results*

Property records obtained by Ransom during the June 2017 Phase I ESA activities indicated the usage of fuel oil on the Lot 26 portion of the Site. Geophysical survey activities were conducted on June 28, 2017, in the vicinity of the Lot 26 Residential Building, to evaluate for the potential presence of a fuel oil UST; however, no evidence of an UST or associated piping was identified associated with REC 8A.

*REC 8B – Former Residential Use – Geophysical Survey Results*

Historic records obtained by Ransom during the June 2017 Phase I ESA activities identified the presence of eight residential structures (not including the current Lot 26 Residential Building) at the Site prior to redevelopment activities in 1974 and 1980. Ransom conducted Site-wide geophysical survey activities between June 27 and June 29, 2017 to evaluate subsurface conditions for the presence of anomalies indicative of former structures, foundations, and/or previously unknown USTs. Geophysical survey activities did not identify subsurface anomalies related to the former residential use on-Site; however, several limitations were encountered during surveying activities, resulting in a partial survey of the Site (See section "Geophysical Investigation" Section above). Based on the geophysical findings and general Phase II results, Ransom believes that these limitations do not warrant further investigation; however, due to these geophysical survey limitations, further response actions may be warranted during Site redevelopment if subsurface structures are identified.

*REC 8A – Former Fuel Oil Use at Current Residential Building – Soil Sampling and Analytical Results*

One soil boring, SB-20, was advanced in the vicinity of a sealed fill pipe, identified during the June 2017 Phase I ESA activities on the eastern side of the Lot 26 Residential Building, to evaluate for potential impacts related to the known fuel oil use. Soil boring SB-20 was advanced to a total depth of 8 feet bgs. Field screening of the soil boring did not identify elevated PID readings; in addition, no odors and/or staining were observed in the soil boring. In the absence of field evidence of impacts, one sample was collected from the first six inches of native soils between approximately 0.0 to 0.5 feet bgs and analyzed for TCL/CP-51 VOCs and PAHs. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-20:

- Benzo(a)anthracene, at a concentration of 1.7 mg/kg, exceeded the Unrestricted Use SCO (1 mg/kg), the Residential Use SCO (1 mg/kg), the Restricted Residential Use SCO (1 mg/kg), and the Protection of Groundwater SCO (1 mg/kg);
- Benzo(a)pyrene, at a concentration of 1.5 mg/kg, exceeded the Unrestricted Use SCO (1 mg/kg), the Residential Use SCO (1 mg/kg), the Restricted Residential Use SCO (1 mg/kg), the Commercial Use SCO (1 mg/kg), and the Industrial Use SCO (1.1 mg/kg);
- Benzo(b)fluoranthene, at a concentration of 1.9 mg/kg, exceeded the Unrestricted Use SCO (1 mg/kg), the Residential Use SCO (1 mg/kg), the Restricted Residential Use SCO (1 mg/kg), and the Protection of Groundwater SCO (1.7 mg/kg);

- Chrysene, at a concentration of 1.6 mg/kg, exceeded the Unrestricted Use SCO (1 mg/kg), the Residential Use SCO (1 mg/kg), and the Protection of Groundwater SCO (1 mg/kg); and
- Indeno(1,2,3-cd)pyrene, at a concentration of 0.98 mg/kg, exceeded the Unrestricted Use SCO (0.5 mg/kg), the Residential Use SCO (0.5 mg/kg), and the Restricted Residential Use SCO (0.5 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

**REC 9 – Potential Fill**

*Soil Sampling and Analytical Results*

One soil boring, SB-21, was advanced to a maximum depth of 10 feet bgs to evaluate for potential fill material on the eastern boundary of the Lot 30 portion of the Site. Material indicative of historic fill (i.e., red brick) was identified at depths ranging from 0.5 to 3.0 feet bgs within soil borings SB-14, SB-21, SB-22, and SB-24 during the Phase II LSI activities. Field screening of the soil boring did not identify elevated PID readings. In addition, no evidence of odors and/or staining was observed in the boring. In the absence of field evidence of impacts, one soil sample was collected at the six-interval exhibiting evidence of fill material (i.e. red brick). Soil samples SB-14B, SB-21, SB-22, and SB-23 were analyzed for TCL/CP-51 VOCs, TCL/CP-51 SVOCs, PCBs, TAL Metals, and/or TCL Pesticides for this REC. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-14B

- Total aroclor (specifically Aroclor-1260), at a concentration of 0.16 mg/kg, exceeded the Unrestricted Use SCO (0.1 mg/kg);
- Cadmium, at a concentration of 3.7 mg/kg, exceeded the Unrestricted Use SCO (2.5 mg/kg) and the Residential Use SCO (2.5 mg/kg);
- Total chromium, at a concentration of 36 mg/kg, exceeded the Unrestricted Use SCO for trivalent chromium (30 mg/kg) and hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);
- Copper, at a total concentration of 4,900 mg/kg, exceeded the Unrestricted Use SCO (50 mg/kg), the Residential Use SCO (270 mg/kg), the Restricted Residential Use SCO (270 mg/kg), the Commercial Use SCO (270 mg/kg), the Protection of Ecological Resources SCO (50 mg/kg), and the Protection of Groundwater Use SCO (450 mg/kg);
- Total mercury, at a concentration of 3 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Residential Use SCO (0.81 mg/kg), the Restricted Residential Use SCO (0.81 mg/kg), the Commercial Use SCO (2.8 mg/kg), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater Use SCO (0.73 mg/kg); and
- Zinc, at a total concentration of 580 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources Use SCO (109 mg/kg).

Soil Sample SB-21

- Arsenic, at a concentration of 27 mg/kg, exceeded the Unrestricted Use SCO (13 mg/kg), the Residential Use SCO (16 mg/kg), the Restricted Residential Use SCO (16 mg/kg), the

Commercial Use SCO (16 mg/kg), the Industrial Use SCO (16 mg/kg), the Protection of Ecological Resources SCO (13 mg/kg), and the Protection of Groundwater SCO (16 mg/kg);
- Copper, at a concentration of 87 mg/kg, exceeded the Unrestricted Use SCO (50 mg/kg) and the Protection of Ecological Resources SCO (50 mg/kg);
- Lead, at a concentration of 100 mg/kg, exceeded the Unrestricted use SCO (63 mg/kg) and the Protection of Ecological Resources SCO (63 mg/kg);
- Total chromium, at a concentration of 30 mg/kg, exceeded the Unrestricted Use SCO for hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);
- Total mercury, at a concentration of 28 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Residential Use SCO (0.81 mg/kg), the Restricted Residential Use SCO (0.81 mg/kg), the Commercial Use SCO (2.8 mg/kg), the Industrial Use SCO (5.7 mg/kg), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater SCO (0.73 mg/kg); and
- Zinc, at a concentration of 110 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg).

Soil Sample SB-22

- Lead, at a concentration of 280 mg/kg, exceeded the Unrestricted use SCO (63 mg/kg) and the Protection of Ecological Resources SCO (63 mg/kg);
- Total chromium, at a concentration of 29 mg/kg, exceeded the Unrestricted Use SCO for hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);
- Total mercury, at a concentration of 0.54 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg) and the Protection of Ecological Resources SCO (0.18 mg/kg); and
- Zinc, at a concentration of 180 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg).

Soil Sample SB-24

- Acetone[3], at a concentration of 0.25 mg/kg, exceeded the Unrestricted Use SCO (0.05 mg/kg) and the Protection of Groundwater SCO (0.05 mg/kg);
- Barium, at a concentration of 750 mg/kg, exceeded the Unrestricted Use SCO (350 mg/kg), the Residential Use SCO (350 mg/kg), the Restricted Residential Use SCO (400 mg/kg), the Commercial Use SCO (400 mg/kg), and the Protection of Ecological Resources SCO (433 mg/kg);
- Cadmium, at a concentration of 4.2 mg/kg, exceeded the Unrestricted Use SCO (2.5 mg/kg), and the Residential Use SCO (2.5 mg/kg). The concentration of 4.2 mg/kg was rounded to the number of significant digits (i.e., one) for the Protection of Ecological Resources SCO (4 mg/kg); therefore, the analytical result of 4.2 mg/kg was rounded to 4 mg/kg, which meets the Protection of Ecological Resources SCO;
- Total chromium, at a concentration of 45 mg/kg, exceeded the Unrestricted Use SCO for trivalent chromium (30 mg/kg) and for hexavalent chromium (1 mg/kg), the Residential Use

[3] It is known that acetone is a common laboratory or glassware contaminant. Since the acetone concentration was low and since there was only one exceedance of it, Ransom believes this concertation to be attributable to the lab.

SCO for trivalent chromium (36 mg/kg) and for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for trivalent chromium (41 mg/kg) and for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);

- Copper, at a concentration of 140 mg/kg, exceeded the Unrestricted Use SCO (50 mg/kg) and the Protection of Ecological Resources SCO (50 mg/kg);
- Lead, at a concentration of 4,300 mg/kg, exceeded the Unrestricted Use SCO (63 mg/kg), the Residential Use SCO (400 mg/kg), the Restricted Residential Use SCO (400 mg/kg), Commercial Use SCO (1,000 mg/kg), the Industrial Use SCO (3,900 mg/kg) the Protection of Ecological Resources SCO (63 mg/kg), and the Protection of Groundwater SCO (450 mg/kg);
- Total mercury, at a concentration of 0.89 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Residential Use SCO (0.81 mg/kg), the Restricted Residential Use SCO (0.81), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater SCO (0.73 mg/kg);
- Nickel, at a concentration of 36 mg/kg, exceeded the Unrestricted Use SCO (30 mg/kg) and the Protection of Ecological Resources SCO (30 mg/kg);
- Zinc, at a concentration of 1,500 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg);
- The pesticide p,p'-DDD, at a concentration of 0.028 mg/kg, exceeded the Unrestricted use SCO (0.0033 mg/kg) and the Protection of Ecological Resources SCO (0.0033 mg/kg); and
- The pesticide p,p'-DDE, with a concentration of 0.011 mg/kg, exceeded the Unrestricted use SCO (0.0033 mg/kg) and the Protection of Ecological Resources SCO (0.0033 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

**REC 10 – Potential Off-Site Sources**

*REC 10A – Off-Site Citgo Service Station // REC 10B – Off-Site Devonshire Discount Tire, Auto Body & Repair Center // REC 10C – Former Riverdale Auto Service Inc. - Soil and Groundwater Sampling and Analytical Results*

Soil boring SB-22 was advanced along the southwestern Lot 30 Site boundary, along Culver Street, and soil boring SB-23 was advanced along the southwestern Lot 30 Site boundary, along Riverdale Avenue, to evaluate potential impacts associated with possible off-Site sources identified adjacent to the Site. Soil borings SB-22 and SB-23 were advanced to a total depth of 18.50 feet bgs and 19.75 feet bgs, respectively. Field screening of soil borings identified elevated PID readings within one soil boring, SB-23, ranging from 3.2 to 6.8 ppm at an approximate depth of 3.0 to 6.5 feet bgs. Soil sample SB-23 was collected at the interval exhibiting the highest PID readings, between 3.5 to 4.0 feet bgs. In the absence of field evidence of impacts within soil boring SB-22, no soil sample was collected. Soil sample SB-23 was analyzed for TCL/CP-51 VOCs, PAHs, and TAL Metals. Analytical results of soil sample SB-23 were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

Soil borings SB-22 and SB-23 were converted to temporary well points (TWP-2 and TWP-1, respectively) to evaluate potential impacts associated with possible off-Site sources identified adjacent to the Site. Temporary well point TWP-1 was installed within soil boring SB-23, which was further

advanced to a total depth of 19.75 feet bgs, and temporary well point TWP-2 was installed within soil boring SB-22, which was further advanced to a total depth of 18.50 feet bgs. Temporary well point TWP-1 was gauged and sampled on June 29, 2017, at which time depth to water was measured at approximately 8.0 feet bgs, while TWP-2 was gauged and sampled on June 28, 2017, at which time depth to water was measured at approximately 8.0 feet bgs. Temporary well point groundwater samples were analyzed for TCL/CP-51 VOCs, TCL/CP-51 SVOCs, and lead. Groundwater sampling analytical results identified the following exceedances of the AWQS:

Groundwater Sample TWP-1

- 1,2,4-Trimethylbenzene, at a concentration of 2,500 micrograms per liter (µg/L), exceeded the AWQS (5 µg/L);
- 1,3,5-Trimethylbenzene, at a concentration of 890 µg/L, exceeded the AWQS (5 µg/L).
- Acetone, at a concentration of 140 µg/L, exceeded the AWQS (50 µg/L);
- Benzene, at a concentration of 94 µg/L, exceeded the AWQS (1 µg/L);
- Ethylbenzene, at a concentration of 1,700 µg/L, exceeded the AWQS (5 µg/L);
- Isopropyl-benzene, at a concentration of 250 µg/L, exceeded the AWQS (5 µg/L);
- m&p-Xylenes, at a concentration of 4,600 µg/L, exceeded the AWQS (5 µg/L);
- n-Butylbenzene, at a concentration of 30 µg/L, exceeded the AWQS (5 µg/L);
- n-Propylbenzene, at a concentration of 560 µg/L, exceeded the AWQS (5 µg/L);
- o-Xylene, at a concentration of 410 µg/L, exceeded the AWQS (5 µg/L);
- sec-Butylbenzene, at a concentration of 25 µg/L, exceeded the AWQS (5 µg/L);
- Toluene, at a concentration of 150 µg/L, exceeded the AWQS (5 µg/L);
- Xylenes (total), at a concentration of 5,000 µg/L, exceeded the AWQS (5 µg/L);
- 2,4-Dimethylphenol, at a concentration of 10 µg/L, exceeded the AWQS (1 µg/L);
- Naphthalene, at a concentration of 160 µg/L, exceeded the AWQS (10 µg/L); and
- Lead (unfiltered), at a concentration of 27 µg/L, exceeded the AWQS (25 µg/L).

Groundwater Sample TWP-2

- 1,2,4-Trimethylbenzene, at a concentration of 740, exceeded the AWQS (5 µg/L);
- 1,3,5-Trimethylbenzene, at a concentration of 87 µg/L, exceeded the AWQS (5 µg/L);
- Acetone, at a concentration of 63 µg/L, exceeded the AWQS (50 µg/L);
- Benzene, at a concentration of 560 µg/L, exceeded the AWQS (1 µg/L);
- Ethylbenzene, at a concentration of 660 µg/L, exceeded the AWQS (5 µg/L);
- Isopropyl-benzene, at a concentration of 100 µg/L, exceeded the AWQS (5 µg/L);
- m&p-xylenes, at a concentration of 960 µg/L, exceeded the AWQS (5 µg/L);
- Methyl-t-butyl ether (MTBE), at a concentration of 140 µg/L, exceeded the AWQS (10 µg/L);
- n-Propylbenzene, at a concentration of 200 µg/L, exceeded the AWQS (5 µg/L);
- o-Xylene, at a concentration of 130 µg/L, exceeded the AWQS (5 µg/L);
- sec-Butylbenzene, at a concentration of 11 µg/L, exceeded the AWQS (5 µg/L);
- Toluene, at a concentration of 67 µg/L, exceeded the AWQS (5 µg/L);
- Xylenes (total), at a concentration of 1,100, exceeded the AWQS (5 µg/L);
- 2,4-Dimethylphenol, at a concentration of 3.7 µg/L, exceeded the AWQS (1 µg/L);
- Naphthalene, at a concentration of 87 µg/L, exceeded the AWQS (10 µg/L);
- Phenol, at a concentration of 4.6 µg/L, exceeded the AWQS (1 µg/L); and
- Lead (unfiltered), at a concentration of 33 µg/L, exceeded the AWQS (25 µg/L).

Additionally, due to the high concentrations of VOC and SVOC concentrations within groundwater samples TWP-1 and TWP-2, the laboratory RLs for several remaining analyzed constituents of concern exceeded the NYSDEC AWQS; please refer to Table 1 for a review of RL exceedances. All other analyzed constituents were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC AWQS.

**Preliminary Waste Characterization**

One composite soil sample, SB-24C, was collected from soil boring SB-24 for preliminary waste classification purposes. Soil sample SB-24 was a five-point composite sample collected at varying intervals between approximately 0.5 to 10.0 feet bgs. Field screening of the soils within soil boring SB-24 did not identify elevated PID readings; however fill material, including brick and coarse gravel, was encountered at a depth ranging from 0.5 and 4.0 feet bgs. In addition, no evidence of odors and/or staining were observed within the boring. Soil sample SB-24C was analyzed for VOCs+15, SVOCs+15, PCBs, TCL Pesticides, TAL Metals, and Cyanide. Analytical results identified the following exceedances of NYSDEC SCOs:

Soil Sample SB-24C

- Lead, at a concentration of 290 mg/kg, exceeded the Unrestricted Use SCO (63 mg/kg) and the Protection of Ecological Resources SCO (63 mg/kg);
- Total chromium, at a concentration of 26 mg/kg, exceeded the Unrestricted Use SCO for hexavalent chromium (1 mg/kg), the Residential Use SCO for hexavalent chromium (22 mg/kg), the Protection of Ecological Resources SCO for hexavalent chromium (1 mg/kg), and the Protection of Groundwater SCO for hexavalent chromium (19 mg/kg);
- Total mercury, at a concentration of 1.4 mg/kg, exceeded the Unrestricted Use SCO (0.18 mg/kg), the Residential Use SCO (0.81 mg/kg), the Protection of Ecological Resources SCO (0.18 mg/kg), and the Protection of Groundwater SCO (0.73 mg/kg); and
- Zinc, at a concentration of 200 mg/kg, exceeded the Unrestricted Use SCO (109 mg/kg) and the Protection of Ecological Resources SCO (109 mg/kg).

All other analyzed constituents of concern were either not detected above the laboratory RLs or were detected at concentrations below the most stringent NYSDEC SCOs.

**SUMMARY AND RECOMMENDATIONS**

Summary

Ransom performed a Phase II LSI at the Site to assess soil and groundwater quality relative to the RECs identified during Ransom's Phase I ESA. Soil samples were collected from around the Site to evaluate the potential environmental impacts to the Site from the identified RECs. Groundwater samples were collected from two temporary well points installed at upgradient locations on Site to evaluate the potential environmental impacts to the Site from potential off-Site sources of contamination.

**REC 1 – Automotive Repair Drainage System**

Soil sampling analysis identified metals concentrations, including barium, total chromium, copper, lead, total mercury, and zinc, that exceeded the NYSDEC's most stringent SCOs, including the Unrestricted Use SCO, the Protection of Groundwater Use SCO, the Residential Use SCO, and/or the Restricted

Residential Use SCO within soil borings collected in the vicinity of the former grease and sand interceptor, former hydraulic lift floor drains, and service garage sealed floor drains. Ransom's review of the data shows that the identified metals concentrations are comparable to the soil sampling results associated with the identified historic fill impacts on-Site (REC 9); therefore, it is more likely that fill materials below the building are the source of the metals concentrations. Further, although the identified concentrations exceed various SCOs, Ransom believes that these findings are not reportable to the NYSDEC since no known spill or release of metals was identified and the concentrations do not exceed the standards for the current and proposed land use (Commercial). Based on these findings, Ransom concludes that no further action is warranted at this time, provided the Site remains in Commercial Use.

However, soil displaced during construction activities potentially containing elevated metals concentrations, and which will be disposed off-site, will require proper waste characterization testing and disposal at an appropriately licensed receiving facility.

**REC 2 – Automotive Repair Hydraulic Lift Systems and REC 11 – Vehicle Painting Operations**

*REC 2A – Hydraulic Lifts and Alignment Rack // REC 2C – Former Hydraulic Lifts, Air/Hydraulic Alignment Rack, and Underground Hydraulic Oil Reservoirs*

Field screening and subsequent soil analytical results did not exceed the most stringent NYSDEC SCOs; therefore, Ransom concludes that potential environmental concerns originating from the current or former hydraulic lift system have not significantly impacted the subsurface soils at the Site. Based on the soil sampling analytical results completed as part of the subsurface investigation to evaluate potential impacts, Ransom concludes that gross impacts in connection with the lifts are not present. However, it is possible that limited/residual impacts to the soil beneath and immediately surrounding the lifts are possible. Prior to, or concurrent with, Site redevelopment activities, Ransom recommends the proper decommissioning and removal of the hydraulic lifts. Since impacts were not identified, further investigation is not recommended at this time; however, if impacts are identified during Site reconstruction activities, further investigation and/or response actions may be warranted.

*REC 2B – Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes*

Soil sampling analysis identified concentrations of PAHs (specifically benzo[a]pyrene, benzo[b]fluoranthene, and indeno[1,2,3-cd]pyrene) that exceeded the NYSDEC Unrestricted Use SCO, Residential Use SCO, the Restricted Residential Use SCO, and/or the Industrial Use SCO within one soil sample (SB-9A), collected at the presumed invert of the wall-mounted hydraulic fluid reservoir piping associated with the hydraulic lift system within Bay 4 of the Lot 30 Site Building. These identified impacts are presumed to either be related to the current hydraulic fluid reservoir piping leading to the lift system or the historical fill across the Site. Based on these findings, Ransom concludes that further investigation of the identified PAH (i.e., benzo[a]pyrene) that exceeded the Industrial Use SCO is warranted. Prior to, or concurrent with, Site redevelopment activities, Ransom recommends a background investigation and/or delineation event to determine the source, followed by remediation of the identified benzo(a)pyrene impact, if applicable. Ransom recommends that the NYSDEC be notified of the discharge, in accordance with State law, if soil is determined to have been impacted by a petroleum discharge. If related to a petroleum release, Ransom recommends that soils identified above the Industrial Use SCO be excavated, documented and disposed off-site, at an appropriately licensed receiving facility. If related to the historic fil materials, Ransom recommends proper soil management during construction activities (see recommendations below).

*REC 2D – Hydraulic Lift Control Boxes*

Soil analysis identified concentrations of PCBs, specifically aroclor 1260, and metals that exceeded the Unrestricted Use SCO at one soil sample (SB-14B) in the vicinity of the western-most hydraulic lift control box located within the Lot 30 Site Building. Ransom concludes that the identified concentrations of PCBs are most likely attributable to the hydraulic lift control box utilized during automotive repair/hydraulic lift operations; however, the metals impacts (i.e., copper and total mercury) are presumably related to the observed historic fill. Although the soil analytical results did not exceed the standards for the current and proposed land use (Commercial), Ransom recommends additional investigation due to the identified impacts within the proposed detention basin area. Specifically, Ransom recommends that if displaced during Site redevelopment activities, any displaced PCB impacts in soil be disposed of off-Site at an appropriately licensed receiving facility. Ransom also recommends the proper disposal of the three-identified hydraulic lift control box units in accordance with local, state, and federal regulations.

*REC 2E – Former Air Compressors and REC 11 – Vehicle Painting Operations*

Analytical sampling results identified concentrations of metals (specifically lead, total mercury, and zinc) that exceeded the Unrestricted Use SCO and the Protection of Ecological Resources SCO, and total chromium that exceeded the Unrestricted Use SCO for trivalent chromium and hexavalent chromium, the Residential Use SCO for hexavalent chromium, the Protection of Ecological Resources SCO for hexavalent chromium, and the Protection of Groundwater SCO for hexavalent chromium. Ransom's review of the data shows that the identified metals concentrations are comparable to the soil sampling results associated with the identified historic fill impacts on-Site (REC 9); therefore, it is more likely that fill materials below the building are the source of the metals concentrations. Further, although the identified metals concentrations exceed several NYSDEC SCOs, Ransom believes that these findings are not reportable to the NYSDEC since no known spill or release related to elevated metals concentrations was identified and concentrations do not exceed the standards for the current and proposed land use (Commercial). Based on these findings, Ransom concludes that no further action is warranted at this time provided the Site remains in Commercial use.

However, soil displaced during construction activities potentially containing elevated metals concentrations, and which will be disposed off-site, will require proper waste characterization testing and disposal at an appropriately licensed receiving facility.

**REC 3 – Vehicle Storage Operations**

Ransom did not identify areas of significant staining and/or evidence of impact associated with the vehicle storage operations; therefore, soil sampling was not completed at REC 3. Based on the lack of evidence of impact, Ransom does not recommend further investigation into the vehicle storage operations on-Site.

**REC 4 – Inactive Oil-Fired Burner**

Ransom was unable to complete subsurface soil investigation activities in the vicinity of the in-active oil-fired burner during the Phases II LSI activities due to the presence of underground utilities in this area. Although visual inspection of the surface conditions in the vicinity of the inactive oil-fired burner did not

identify breaches within the concrete slab, a significant layer of dust/potential waste ash was noted. Due to the likely presence of waste ash, which may contain heavy metals, Ransom recommends the proper removal and disposal of the inactive oil-fired burner in accordance with local, state, and federal regulations and cleaning of the dust/waste ash. Due to the inability to obtain analytical data and/or observe breaches to the floor slab beneath the inactive oil-fired burner, Ransom recommends the visual inspection of the floor slab after the slab is cleaned off and proper removal and disposal of the inactive oil-fired burner is completed. If a potential pathway to subsurface soils is identified, further investigation and/or action may be required.

**REC 5 – Former 3,000-gallon Fuel Oil UST**

Geophysical survey activities conducted on June 28, 2017 identified one subsurface metallic anomaly indicative of an UST in the presumed location of the former 3,000-gallon fuel oil UST, located on the northeast side of the Lot 30 Site Building, and appurtenant vent and product piping.

Subsequent soil sampling analysis did not identify concentrations of contaminants associated with fuel oil operations that exceeded the NYSDEC's most stringent SCOs. Based on the geophysical survey results and soil sampling analytical results completed as part of the subsurface investigation to evaluate potential impacts, Ransom concludes that gross impacts in connection with the UST are not present. However, it is possible that limited/residual impacts to the soil beneath and immediately surrounding the UST are possible. Prior to or concurrent with redevelopment, since the UST is within the footprint of the proposed CVS Pharmacy/Store, it should be properly removed and the immediately surrounding soil be assessed for evidence of a release (see Recommendations below).

**REC 6 – Former 550-gallon Waste Oil UST**

Geophysical survey activities conducted on June 28, 2017 did not identify a subsurface anomaly indicative of an UST in the presumed location of the former 550-gallon waste oil UST, located on the southeast exterior corner of the Lot 30 Site Building. Soil sampling analysis of soils collected at the presumed invert of the former 550-gallon waste oil UST identified concentrations of total chromium that exceeded the Unrestricted Use SCO for trivalent chromium and hexavalent chromium, the Residential Use SCO for hexavalent chromium, the Protection of Ecological Resources SCO for hexavalent chromium, and the Protection of Groundwater SCO for hexavalent chromium, and manganese that exceeded the Unrestricted Use SCO and the Protection of Ecological Resources SCO. Ransom's review of the data shows that the identified metals concentrations are not common constituents of concern for waste oil; therefore, it is more likely that fill materials used to backfill the UST grave are the source of these metals concentrations. Although the identified concentrations exceed various SCOs, Ransom believes that these findings are not reportable to the NYSDEC since no known spill or release of metals was identified and the concentrations do not exceed the standards for the current and proposed land use (Commercial). Based on these findings, Ransom concludes that no further action is warranted at this time provided the Site remains in Commercial use.

**REC 7 – 55-gallon Waste Oil Drum Storage**

Soil sampling analysis of subsurface soils collected beneath the former 55-gallon waste oil drum storage area identified metals concentrations (specifically lead and total mercury) that exceeded the Unrestricted Use SCO and the Protection of Ecological Resources SCO, and total chromium that exceeded the Unrestricted Use SCO and the Protection of Ecological Resources SCO for hexavalent chromium.

Ransom's review of the analytical data shows that the identified metals concentrations are comparable to the soil sampling results associated with the identified historic fill impacts on-Site (REC 9); therefore, it is more likely that fill materials below the building are the source of the metals concentrations and not the storage of 55-gallon waste oil drums. Although the identified concentrations exceed various SCOs, Ransom believes that these findings are not reportable to the NYSDEC since no known spill or release of metals was identified and the concentrations do not exceed the standards for the current and proposed land use (Commercial). Based on these findings, Ransom concludes that no further action is warranted at this time, provided the Site remains in Commercial Use.

**REC 8A – Known Fuel Oil Use at Residential Building**

Geophysical survey activities were conducted on June 28, 2017 on the Lot 30 portion of the Site; however, no evidence of an UST was identified. Soil analytical results identified concentrations of PAHs that exceeded the Unrestricted Use SCO, the Residential Use SCO, the Restricted Residential Use SCO, the Commercial Use SCO, and the Industrial Use SCO in the vicinity of the sealed fill pipe, presumably related to former fuel oil usage or possibly historic fill. Based on these findings, Ransom recommends further investigation with regard to the identified impacts. If related to a petroleum release, Ransom recommends the delineation and subsequent excavation/disposal of soils with concentrations that exceed the Commercial Use and Industrial Use SCO. If related to the historic fil materials, Ransom recommends proper soil management during construction activities (see recommendations below).

**REC 8B – Former Residential Use**

Between June 27, 2017 and June 29, 2017, Ransom conducted Site-wide geophysical survey activities to evaluate subsurface conditions for the presence of anomalies indicative of former structures, foundations, and/or previously unknown USTs. Geophysical survey results did not identify evidence of previously unknown USTs or septic systems at the Site; however, due to the limited nature of the geophysical survey, Ransom recognizes that they may be discovered during Site redevelopment activities. Therefore, Ransom recommends that in the case an underground heating oil tank and/or septic system is identified, they should be properly removed and disposed of in accordance with applicable local, state, and federal regulations. Ransom should be contacted immediately if evidence of impacts is identified in connection with a previously unidentified subsurface UST or septic system.

**REC 9 – Potential Fill**

During the course of the subsurface soil investigation activities, material indicative of historic fill, particularly the presence of red brick, was identified at depths ranging from 0.5 to 3.0 feet bgs within soil borings SB-14, SB-21, SB-22, and SB-24. Analysis of the soils in the vicinity of the historic fill identified concentrations of VOCs, metals, and pesticides that exceeded the most stringent NYSDEC SCOs, including four metals (arsenic, barium, copper, and lead) that exceeded the Commercial Use SCOs and/or the Industrial Use SCOs. Based on these findings, Ransom recommends further response actions with regards to the identified historic fill on-Site (i.e., engineering controls and a long-term Soil Management Plan for implementation during future subsurface work at the Site). Ransom understands that exceedances of the Commercial Use SCOs and/or the Industrial Use SCOs related to historic fill exist within the proposed building footprint and proposed detention basin area. Ransom notes that the fill material can be reused on-Site provided that it is being reused within other areas containing the identified historic fill. If off-site disposal is required, Ransom recommends that the fill material be characterized

and disposed of in accordance with applicable local, state, and federal regulations as well as accepting facility policies.

**REC 10 – Potential Off-Site Sources**

Groundwater sampling analytical results identified concentrations of VOCs, SVOCs, and lead that exceeded the NYSDEC AWQS for groundwater collected from temporary well points TWP-1 and TWP-2. Elevated concentrations indicative of gasoline impacts were identified within groundwater from both temporary well points. Based on these findings, Ransom concludes that off-Site sources of contamination have impacted/are impacting the groundwater conditions on-Site.

New York State does not have Vapor Intrusion (VI) groundwater screening levels developed for groundwater to evaluate for potential vapor concerns within structures. In the absence of these screening levels, Ransom compared the groundwater results to the New Jersey Department of Environmental Protection (NJDEP) VI Groundwater Screening Levels (GWSL) for those compounds that exceeded the NYSDEC AWQS in an effort to evaluate potential vapor intrusion into the proposed CVS building. The results of the comparison identified several compounds with concentrations identified in groundwater from TWP-1 and TWP-2 that exceeded the applicable NJDEP VI GWSLs. The locations of these two temporary well points are proximate to the proposed CVS building and represent a potential vapor intrusion concern. Ransom recommends the installation of a passive sub-slab mitigation system concurrent with future Site redevelopment activities.

However, groundwater displaced during construction activities, potentially containing elevated VOCs, SVOCs, and lead concentrations, will require proper management (e.g. treatment and discharge permit, or containment and disposal at an appropriately licensed receiving facility).

**Preliminary Waste Characterization**

Soil sampling analysis identified metals concentrations, including total chromium, lead, total mercury, and zinc, that exceeded the NYSDEC's most stringent SCOs, including the Unrestricted Use SCO, the Protection of Ecological Resources SCO, the Protection of Groundwater Use SCO, the Residential Use SCO, and/or the Restricted Residential Use SCO within the composite soil sample collected within the footprint of the proposed detention basin. Ransom's review of the data shows that the identified metals concentrations are likely associated with the identified historic fill impacts on-Site (REC 9), see above. For soil management purposes, any soil displaced during construction activities potentially containing elevated metals concentrations, and which will be disposed off-site, will require proper waste characterization testing and disposal at an appropriately licensed receiving facility.

<u>Recommendations</u>

Based on the findings and conclusions presented above, Ransom makes the following recommendations:

- Based on the investigative results, Ransom does not recommend further investigation of REC 1, REC 2C, REC 2E, REC 3, REC 5, REC 6 or REC 11.
- Ransom recommends the proper removal and disposal of the three-identified hydraulic lift control box units, hydraulically operated lifts, and associated hydraulic oil containment

systems within the Lot 30 Site Building according to local, state and federal regulations prior to or concurrent with Site redevelopment activities.

- Due to the identified PCB impacts within the proposed detention basin (REC 2D), Ransom recommends that, if displaced during Site redevelopment activities, any displaced PCB impacts in soil be disposed of off-Site, at an appropriately licensed receiving facility.
- Due to the likely presence of waste ash, which may contain heavy metals, Ransom recommends the proper removal and disposal of the inactive oil-fired burner (REC 4) in accordance with local, state, and federal regulations.
- Ransom recommends the visual inspection of the floor slab in the vicinity of the inactive oil-fired burner (REC 4) after cleaning and removal of the burner to evaluate potential impacts in this area.
- Ransom recommends that the suspect UST (REC 5) identified during the June 28, 2017 geophysical survey activities be properly removed and disposed off-site prior to, or concurrent with, redevelopment activities in accordance with applicable federal, state and local regulations. Although soil samples surrounding the UST did not exhibit impacts, the area beneath the UST could not be sampled due to the presence of the UST itself. If soils are observed as being impacted and/or soil analytical results indicate a release to Site soils, appropriate remedial action(s) should be taken, including but not limited to, notification to the NYSDEC, soil excavation, post-remediation soil sampling, groundwater investigation, and required reporting activities. If impacts above the NYSDEC's SCOs are further identified, further remedial action (e.g., soil removal, disposal, reporting, etc.) may be warranted.
- The 55-gallon drums (REC 7) present on-Site should be removed from the Site and properly disposed of prior to Site construction activities, and documentation of their disposal should be maintained with a copy provided to CVS.
- Soil analytical results identified elevated concentrations of PAHs in the vicinity of a sealed fill pipe on the eastern exterior of the Lot 26 Site Building (REC 8A) and the wall-mounted hydraulic fluid reservoir piping associated with the hydraulic lift system within Bay 4 of the Lot 30 Site Building (REC 2B). Ransom recommends further investigation of REC 2B and REC 8A prior to notification to the NYSDEC for these identified impacts in an effort to determine if they are related to a petroleum discharge, or historic fill. If determined to be the result of a petroleum discharge, Ransom recommends the delineation, excavation and disposal of soils with concentrations that exceed the Commercial Use and/or Industrial Use SCOs prior to or concurrent with the Site redevelopment activities that were identified in conjunction with the known fuel oil use at the Lot 26 Site Building (REC 8A) and hydraulic oil at the Lot 30 Site Building (REC 2B). However, if related to historic fill, Ransom recommends proper soil management activities. Specifically, if displaced during construction, reuse on-Site at other historic fill areas is appropriate, as historic fill was observed across the Site from grade to at least three feet below grade; however, if the material is geotechnically unsuitable or it is determined to be excess, the impacted soils should be properly characterized and disposed of at an appropriately licensed facility.
- It is Ransom's opinion that the identified metals exceedances of the Commercial Use SCOs and/or the Industrial Use SCOs (i.e., arsenic, barium, copper, and lead) are related to historic fill materials. Based on these findings and since fill materials were identified across the Site,

Ransom recommends further response actions. Although not necessarily a reportable condition to the NYSDEC, Ransom recommends implementing engineering controls and a long-term Soil Management Plan, where the engineering controls will include construction of the proposed Site building, parking lot/drives and other construction features that will serve as a cap for the contaminated fill (i.e., asphalt paving, landscaping, concrete sidewalk, and building slab). The contaminated fill may remain on-Site or be reused on-Site provided that they are geotechnically suitable and the engineering controls are carried out.

- Ransom recommends that fill material displaced during Site redevelopment activities, which cannot be reused on-Site, be properly tested and managed for off-site beneficial reuse and/or tested for waste characterization parameters and disposed of in accordance with applicable local, state, and federal regulations, as well as accepting facility policies.

- It is Ransom's opinion that the identified VOCs, SVOCs, and lead impacts in groundwater (REC 10) are likely a result of off-Site sources of contamination, and likely not attributable to current and/or former on-Site automotive service operations. Groundwater was encountered during Phase II LSI activities at approximately 8 feet bgs. Based on the identified groundwater impacts, Ransom recommends the implementation of a Groundwater Management Plan (GMP) in the event that Site redevelopment activities extend beyond approximately 7 feet bgs.

- Based on the identified VOC groundwater impacts, likely attributable to off-Site groundwater impacts (REC 10), Ransom recommends the installation of a passive sub-slab vapor mitigation system concurrent with future Site redevelopment activities.

- Due to the identified PAHs and metals on-Site, Ransom recommends that a Soil Management Plan (SMP) be developed to properly manage soils displaced during remediation activities, demolition, and/or Site redevelopment activities that will be exported from the Site.

- Although no indication of a septic system(s) or other suspect UST(s) was identified, they may be discovered during Site redevelopment due to the geophysical survey limitations. Therefore, Ransom recommends that, in the case an underground tank and/or a septic tank is identified, they should be properly removed and disposed of in accordance with applicable federal, state and local regulations.

- Based on the identified exceedances of the Unrestricted and Residential Use SCOs, soils planned for export will require additional waste characterization testing, depending on the requirements of the receiving site or facility. The limited nature of our Phase II LSI, and the associated analytical testing, does not authorize exported soils being used for unrestricted reuse; therefore, exported soils are not considered to be certified clean fill material at this time.

- All on-Site drainage structures, including septic system components and storm water drainage structures (catch basins, dry wells, etc.), that will not be reused as part of the Site redevelopment should be properly decommissioned in accordance with applicable regulations.

If you have any questions regarding this letter report, please do not hesitate to call.

Sincerely,
RANSOM CONSULTING, INC.

Lauren Rojewski
Environmental Scientist

Kimberly Skibo
Project Manager



Brian R. Pettingill, P.G.
Senior Project Manager/CVS Program Manager

Attachments

**TABLES**

Table 1 – Soil Sampling Analytical Results
Table 2 – Groundwater Sampling Analytical Results

Phase II Limited Subsurface Investigation
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

# TABLE 1
## Soil Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-1 | | | SB-2 | | | SB-3 | | | SB-6A | | | SB-6B | | | SB-7 | | | SB-8A | | | SB-8B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-009 | | | AC98737-001 | | | AC98711-005 | | | AC98737-002 | | | AC98737-003 | | | AC98694-001 | | | AC98694-002 | | | AC98694-003 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 3.0-3.5 | | | 0.5-1.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.68 | 100 | 100 | 500 | 1,000 | - | 0.68 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.002 |
| 1,1,2,2-Tetrachloroethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.002 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,1,2-Trichloroethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,1-Dichloroethane | 0.27 | 19 | 26 | 240 | 480 | - | 0.27 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,1-Dichloroethene | 0.33 | 100 | 100 | 500 | 1,000 | - | 0.33 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,2,3-Trichlorobenzene | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,2,4-Trichlorobenzene | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,2,4-Trimethylbenzene | 3.6 | 47 | 52 | 190 | 380 | - | 3.6 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| 1,2-Dibromo-3-chloropropane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,2-Dibromoethane | - | - | - | - | - | - | - | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| 1,2-Dichlorobenzene | 1.10 | 100 | 100 | 500 | 1,000 | - | 1.1 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,2-Dichloroethane | 0.02 | 2.3 | 3.1 | 30 | 60 | 10 | 0.02 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,2-Dichloropropane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,3,5-Trimethylbenzene | 8.4 | 47 | 52 | 190 | 380 | - | 8.4 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| 1,3-Dichlorobenzene | 2.4 | 17 | 49 | 280 | 560 | - | 0.19 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,4-Dichlorobenzene | 1.8 | 9.8 | 13 | 130 | 250 | 20 | 1.8 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 1,4-Dioxane | 0.1 | 9.8 | 13 | 130 | 250 | 0.1 | 0.1 | | U | 0.12 | | U | 0.12 | | U | 0.11 | | U | 0.12 | | U | 0.11 | | U | 0.11 | | U | 0.12 | | U | 0.10 |
| 2-Butanone | 0.12 | 100 | 100 | 500 | 1,000 | 100 | 0.12 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 2-Hexanone | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| 4-Isopropyltoluene | - | - | - | - | - | - | - | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| 4-Methyl-2-pentanone | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Acetone | 0.05 | 100 | 100 | 500 | 1,000 | 2.2 | 0.05 | | U | 0.012 | | U | 0.012 | | U | 0.011 | | U | 0.012 | | U | 0.011 | | U | 0.011 | | U | 0.012 | | U | 0.010 |
| Benzene | 0.06 | 2.9 | 4.8 | 44 | 89 | 70 | 0.06 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| Bromochloromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Bromodichloromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Bromoform | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Bromomethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Carbon disulfide | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Carbon tetrachloride | 0.76 | 1.4 | 2.4 | 22 | 44 | - | 0.76 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Chlorobenzene | 1.1 | 100 | 100 | 500 | 1,000 | 40 | 1.1 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Chloroethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Chloroform | 0.37 | 10 | 49 | 350 | 700 | 12 | 0.37 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Chloromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| cis-1,2-Dichloroethene | 0.25 | 59 | 100 | 500 | 1,000 | - | 0.25 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| cis-1,3-Dichloropropene | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Cyclohexane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Dibromochloromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Dichlorodifluoromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Ethylbenzene | 1 | 30 | 41 | 390 | 780 | - | 1 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| Isopropylbenzene | - | - | - | - | - | - | - | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| m&p-Xylenes | - | - | - | - | - | - | - | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| Methyl Acetate | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Methylcyclohexane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Methylene chloride | 0.05 | 51 | 100 | 500 | 1,000 | 12 | 0.05 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Methyl-t-butyl ether | 0.93 | 62 | 100 | 500 | 1,000 | - | 0.93 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| n-Butylbenzene | 12 | - | - | - | - | - | - | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| n-Propylbenzene | 3.9 | 100 | 100 | 500 | 1,000 | - | 3.9 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| o-Xylene | - | - | - | - | - | - | - | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| sec-Butylbenzene | 11 | 100 | 100 | 500 | 1,000 | - | 11 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| Styrene | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| t-Butylbenzene | 5.9 | 100 | 100 | 500 | 1,000 | - | 5.9 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |

# TABLE 1
## Soil Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-1 | | | SB-2 | | | SB-3 | | | SB-6A | | | SB-6B | | | SB-7 | | | SB-8A | | | SB-8B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-009 | | | AC98737-001 | | | AC98711-005 | | | AC98737-002 | | | AC98737-003 | | | AC98694-001 | | | AC98694-002 | | | AC98694-003 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 3.0-3.5 | | | 0.5-1.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 1.3 | 5.5 | 19 | 150 | 300 | 2 | 1.3 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Toluene | 0.7 | 100 | 100 | 500 | 1,000 | 36 | 0.7 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| trans-1,2-Dichloroethene | 0.19 | 100 | 100 | 500 | 1,000 | - | 0.19 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| trans-1,3-Dichloropropene | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Trichloroethene | 0.47 | 10 | 21 | 200 | 400 | 2 | 0.47 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Trichlorofluoromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Vinyl chloride | 0.02 | 0.21 | 0.90 | 13 | 27 | - | 0.02 | | U | 0.0025 | | U | 0.0024 | | U | 0.0022 | | U | 0.0024 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0020 |
| Xylenes (Total) | 0.26 | 100 | 100 | 500 | 1,000 | 0.26 | 1.6 | | U | 0.0012 | | U | 0.0012 | | U | 0.0011 | | U | 0.0012 | | U | 0.0011 | | U | 0.0011 | | U | 0.0012 | | U | 0.0010 |
| Total VOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| **Semi-Volatile Organic Compounds (SVOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1'-Biphenyl | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 1,2,4,5-Tetrachlorobenzene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,3,4,6-Tetrachlorophenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4,5-Trichlorophenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4,6-Trichlorophenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dichlorophenol | - | - | - | - | - | - | - | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dimethylphenol | - | - | - | - | - | - | - | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dinitrophenol | - | - | - | - | - | - | - | | U | 0.19 | | U | 0.19 | | U | 0.2 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dinitrotoluene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,6-Dinitrotoluene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Chloronaphthalene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Chlorophenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Methylnaphthalene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.04 | | U | 0.038 | | U | 0.038 | | U | 0.039 |
| 2-Methylphenol | 0.33 | 100 | 100 | 500 | 1000 | - | 0.33 | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Nitroaniline | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Nitrophenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 3&4-Methylphenol | 34* | 34* | 100 | 500 | 1000 | - | 0.33 | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 3,3'-Dichlorobenzidine | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 3-Nitroaniline | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4,6-Dinitro-2-methylphenol | - | - | - | - | - | - | - | | U | 0.19 | | U | 0.19 | | U | 0.2 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Bromophenyl-phenylether | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Chloro-3-methylphenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Chloroaniline | - | - | - | - | - | - | - | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Chlorophenyl-phenylether | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Nitroaniline | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Nitrophenol | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Acenaphthene | 20 | 100 | 100 | 500 | 1000 | 20 | 98 | | U | 0.038 | | U | 0.038 | | U | 0.039 | 0.057 | | 0.039 | | U | 0.04 | | U | 0.038 | | U | 0.038 | | U | 0.039 |
| Acenaphthylene | 100 | 100 | 100 | 500 | 1000 | - | 107 | 0.051 | | 0.038 | 0.048 | | 0.038 | | U | 0.039 | 0.079 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.049 | | 0.038 | | U | 0.039 |
| Acetophenone | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Anthracene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 0.1 | | 0.038 | 0.07 | | 0.038 | | U | 0.039 | 0.15 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.097 | | 0.038 | | U | 0.039 |
| Atrazine | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Benzaldehyde | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Benzo[a]anthracene | 1 | 1 | 1 | 5.6 | 11 | - | 1 | 0.6 | | 0.038 | 0.44 | | 0.038 | | U | 0.039 | 0.63 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.52 | | 0.038 | | U | 0.039 |
| Benzo[a]pyrene | 1 | 1 | 1 | 1 | 1.1 | 2.6 | 22 | 0.5 | | 0.038 | 0.45 | | 0.038 | | U | 0.039 | 0.68 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.5 | | 0.038 | | U | 0.039 |
| Benzo[b]fluoranthene | 1 | 1 | 1 | 5.6 | 11 | - | 1.7 | 0.73 | | 0.038 | 0.59 | | 0.038 | | U | 0.039 | 1 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.7 | | 0.038 | | U | 0.039 |
| Benzo[g,h,i]perylene | 100 | 100 | 100 | 500 | 1000 | - | 1.7 | 0.31 | | 0.038 | 0.33 | | 0.038 | | U | 0.039 | 0.5 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.33 | | 0.038 | | U | 0.039 |
| Benzo[k]fluoranthene | 0.8 | 1 | 3.9 | 56 | 100 | - | 1.7 | 0.26 | | 0.038 | 0.21 | | 0.038 | | U | 0.039 | 0.29 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.18 | | 0.038 | | U | 0.039 |
| bis(2-Chloroethoxy)methane | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| bis(2-Chloroethyl)ether | - | - | - | - | - | - | - | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| bis(2-Chloroisopropyl)ether | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| bis(2-Ethylhexyl)phthalate | - | - | - | - | - | - | - | 0.083 | | 0.038 | 0.042 | | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Butylbenzylphthalate | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-1 | | | SB-2 | | | SB-3 | | | SB-6A | | | SB-6B | | | SB-7 | | | SB-8A | | | SB-8B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-009 | | | AC98737-001 | | | AC98711-005 | | | AC98737-002 | | | AC98737-003 | | | AC98694-001 | | | AC98694-002 | | | AC98694-003 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 3.0-3.5 | | | 0.5-1.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Semi-Volatile Organic Compounds (SVOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Caprolactam | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Carbazole | - | - | - | - | - | - | - | 0.058 | | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Chrysene | 1 | 1 | 3.9 | 56 | 110 | - | 1 | 0.61 | | 0.038 | 0.43 | | 0.038 | | U | 0.039 | 0.77 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.53 | | 0.038 | | U | 0.039 |
| Dibenzo[a,h]anthracene | 0.33 | 0.33 | 0.33 | 0.56 | 1.1 | - | 1000 | 0.12 | | 0.038 | 0.11 | | 0.038 | | U | 0.039 | 0.17 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.12 | | 0.038 | | U | 0.039 |
| Dibenzofuran | - | - | - | - | - | - | - | 0.014 | | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Diethylphthalate | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Dimethylphthalate | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Di-n-butylphthalate | - | - | - | - | - | - | - | 0.02 | | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Di-n-octylphthalate | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Fluoranthene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 1.1 | | 0.038 | 0.74 | | 0.038 | | U | 0.039 | 1.3 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.85 | | 0.038 | | U | 0.039 |
| Fluorene | 30 | 100 | 100 | 500 | 1000 | 30 | 386 | | U | 0.038 | | U | 0.038 | | U | 0.039 | 0.053 | | 0.039 | | U | 0.04 | | U | 0.038 | | U | 0.038 | | U | 0.039 |
| Hexachlorobenzene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Hexachlorobutadiene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Hexachlorocyclopentadiene | - | - | - | - | - | - | - | | U | 0.089 | | U | 0.09 | | U | 0.092 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Hexachloroethane | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Indeno[1,2,3-cd]pyrene | 0.5 | 0.5 | 0.5 | 5.6 | 11 | - | 8.2 | 0.3 | | 0.038 | 0.28 | | 0.038 | | U | 0.039 | 0.47 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.29 | | 0.038 | | U | 0.039 |
| Isophorone | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Naphthalene | 12 | 100 | 100 | 500 | 1000 | - | 12 | 0.014 | | 0.0095 | | U | 0.0096 | | U | 0.0098 | 0.021 | | 0.0098 | | U | 0.0099 | | U | 0.0096 | 0.013 | | 0.0096 | | U | 0.0098 |
| Nitrobenzene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| N-Nitroso-di-n-propylamine | - | - | - | - | - | - | - | | U | 0.0095 | | U | 0.0096 | | U | 0.0098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| N-Nitrosodiphenylamine | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Pentachlorophenol | 0.8 | 100 | 100 | 500 | 1000 | - | 1000 | | U | 0.19 | | U | 0.19 | | U | 0.2 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Phenanthrene | 100 | 100 | 100 | 50 | 1000 | - | 1000 | 0.47 | | 0.038 | 0.28 | | 0.038 | | U | 0.039 | 0.86 | | 0.039 | | U | 0.04 | | U | 0.038 | 0.39 | | 0.038 | | U | 0.039 |
| Phenol | 0.33 | - | - | - | - | - | - | | U | 0.038 | | U | 0.038 | | U | 0.039 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Pyrene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 1.1 | | 0.038 | 0.77 | | 0.038 | | U | 0.039 | 1.3 | | 0.039 | | U | 0.04 | | U | 0.038 | 1 | | 0.038 | | U | 0.039 |
| Total SVOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

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**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-1 | | | SB-2 | | | SB-3 | | | SB-6A | | | SB-6B | | | SB-7 | | | SB-8A | | | SB-8B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-009 | | | AC98737-001 | | | AC98711-005 | | | AC98737-002 | | | AC98737-003 | | | AC98694-001 | | | AC98694-002 | | | AC98694-003 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 3.0-3.5 | | | 0.5-1.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Metals** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | - | - | - | - | - | - | - | 9,600 | | 230 | 11,000 | | 230 | 10,000 | | 240 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Antimony | - | - | - | - | - | - | - | | U | 0.91 | | U | 0.92 | | U | 0.94 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Arsenic | 13 | 16 | 16 | 16 | 16 | 13 | 16 | 5.3 | | 0.23 | 6.6 | | 0.23 | 1.7 | | 0.24 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Barium | 350 | 350 | 400 | 400 | 10,000 | 433 | 820 | ***360*** | | 11 | 160 | | 11 | 76 | | 12 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Beryllium | 7.2 | 14 | 72 | 590 | 2,700 | 10 | 47 | 0.33 | | 0.23 | 0.44 | | 0.23 | 0.33 | | 0.24 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Cadmium | 2.5 | 2.5 | 4.3 | 9.3 | 60 | 4 | 7.5 | 1.9 | | 0.45 | 1.2 | | 0.46 | | U | 0.47 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Calcium | - | - | - | - | - | - | - | 24,000 | | 1,100 | 8,300 | | 1,100 | 1,500 | | 1,200 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Total Chromium* | 30/1 | 36/22 | 180/110 | 1,500/400 | 6,800/800 | 41/1 | -/19 | **78** | | 5.7 | **23** | | 5.7 | ***17*** | | 5.9 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Cobalt | - | - | - | - | - | - | - | 8.2 | | 2.8 | 7.7 | | 2.9 | 5.4 | | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Copper | 50 | 270 | 270 | 270 | 10,000 | 50 | 1,720 | ***69*** | | 5.7 | ***61*** | | 5.7 | 13 | | 5.9 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Iron | - | - | - | - | - | - | - | 22,000 | | 230 | 19,000 | | 230 | 15,000 | | 240 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Lead | 63 | 400 | 400 | 1,000 | 3,900 | 63 | 450 | **620** | | 5.7 | **520** | | 5.7 | 63 | | 5.9 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Magnesium | - | - | - | - | - | - | - | 6,200 | | 570 | 4,300 | | 570 | 2,500 | | 590 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Manganese | 1,600 | 2,000 | 2,000 | 10,000 | 10,000 | 1,600 | 2,000 | 330 | | 11 | 360 | | 11 | 290 | | 12 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Total Mercury | 0.18 | 0.81 | 0.81 | 2.8 | 5.7 | 0.18 | 0.73 | ***0.8*** | | 0.095 | **1.9** | | 0.096 | 0.13 | | 0.098 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Nickel | 30 | 140 | 310 | 310 | 10,000 | 30 | 130 | 25 | | 5.7 | 18 | | 5.7 | 13 | | 5.9 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Potassium | - | - | - | - | - | - | - | 1,200 | | 570 | 940 | | 570 | 650 | | 590 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Selenium | 3.9 | 36 | 180 | 1,500 | 6,800 | 3.9 | 4 | | U | 2.3 | | U | 2.3 | | U | 2.4 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Silver | 2 | 36 | 180 | 1,500 | 6,800 | 2 | 8.3 | | U | 0.23 | | U | 0.23 | | U | 0.24 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Sodium | - | - | - | - | - | - | - | | U | 280 | 440 | | 290 | | U | 290 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Thallium | - | - | - | - | - | - | - | | U | 0.45 | | U | 0.46 | | U | 0.47 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Vanadium | - | - | - | - | - | - | - | 42 | | 11 | 24 | | 11 | 15 | | 12 | NA | | | NA | | | NA | | | NA | | | NA | | |
| Zinc | 109 | 3,300 | 10,000 | 10,000 | 10,000 | 109 | 2,480 | ***410*** | | 11 | ***300*** | | 11 | 62 | | 12 | NA | | | NA | | | NA | | | NA | | | NA | | |
| **Pesticides** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a-Chlordane | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Aldrin | 0.01 | 0.02 | 0.10 | 0.68 | 1.40 | 0.14 | 0.19 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Alpha-BHC | 0.02 | 0.10 | 0.48 | 3.40 | 6.80 | 0.04 | 0.02 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| beta-BHC | 0.04 | 0.07 | 0.36 | 3 | 14 | 0.6 | 0.09 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Chlordane (Total) | 0.09 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| delta-BHC | 0.04 | 100 | 100 | 500 | 1,000 | 0.04 | 0.25 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Dieldrin | 0.01 | 0.04 | 0.2 | 1.40 | 2.8 | 0.01 | 0.1 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan I | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan II | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan Sulfate | 2.4 | 4.8 | 24 | 200 | 920 | - | 1,000 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin | 0.01 | 2.2 | 11 | 89 | 410 | 0.01 | 0.06 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin Aldehyde | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin Ketone | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| gamma-BHC | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Heptachlor | 0.04 | 0.42 | 2.1 | 15 | 29 | 0.14 | 0.38 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Heptachlor Epoxide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Methoxychlor | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDD | 0.0033 | 2.6 | 13 | 92 | 180 | 0.0033 | 14 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDE | 0.0033 | 1.8 | 8.9 | 62 | 120 | 0.0033 | 17 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDT | 0.0033 | 1.7 | 7.9 | 47 | 94 | 0.0033 | 136 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Toxaphene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| y-Chlordane | 0.094 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

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13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-1 | | | SB-2 | | | SB-3 | | | SB-6A | | | SB-6B | | | SB-7 | | | SB-8A | | | SB-8B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-009 | | | AC98737-001 | | | AC98711-005 | | | AC98737-002 | | | AC98737-003 | | | AC98694-001 | | | AC98694-002 | | | AC98694-003 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 3.0-3.5 | | | 0.5-1.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Polychlroinated Biphenyls (PCBs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aroclor (Total) | 0.1 | 1 | 1 | 1 | 25 | 1 | 3.2 | 0.05 | | 0.028 | U | | 0.029 | U | | 0.029 | 0.059 | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1016 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1221 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1232 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1242 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1248 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1254 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1260 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1262 | - | - | - | - | - | - | - | 0.05 | | 0.028 | U | | 0.029 | U | | 0.029 | 0.059 | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| Aroclor-1268 | - | - | - | - | - | - | - | U | | 0.028 | U | | 0.029 | U | | 0.029 | U | | 0.029 | U | | 0.03 | U | | 0.029 | U | | 0.029 | U | | 0.029 |
| **Additional Analysis** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

**Notes:**

Q = Data Qualifier
U = Not Detected
NA = Not Analyzed
J = Estimated Value
RL = Reporting Limit
All concentrations are in milligrams per kilogram (mg/kg)
**140** = concentration exceeds Protection of Groundwater Soil Cleanup Objective
***140*** = concentration exceeds Unrestricted Use Soil Cleanup Objective
**10** = reporting limit exceeds most stringent Soil Cleanup Objective
* = The SCOs listed for Total Chromium are the trivalent chromium SCOs and hexavalent chromium SCOs, respectively, as total chromium does not have an established SCO.

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-9A | | | SB-9B | | | SB-10 | | | SB-11 A | | | SB-11 B | | | SB-12 | | | SB-13A | | | SB-13B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-005 | | | AC98694-006 | | | AC98694-008 | | | AC98711-006 | | | AC98711-007 | | | AC98694-010 | | | AC98694-011 | | | AC98694-012 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.0-8.5 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.68 | 100 | 100 | 500 | 1,000 | - | 0.68 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,1,2,2-Tetrachloroethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,1,2-Trichloroethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,1-Dichloroethane | 0.27 | 19 | 26 | 240 | 480 | - | 0.27 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,1-Dichloroethene | 0.33 | 100 | 100 | 500 | 1,000 | - | 0.33 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,2,3-Trichlorobenzene | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,2,4-Trichlorobenzene | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,2,4-Trimethylbenzene | 3.6 | 47 | 52 | 190 | 380 | - | 3.6 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| 1,2-Dibromo-3-chloropropane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,2-Dibromoethane | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| 1,2-Dichlorobenzene | 1.10 | 100 | 100 | 500 | 1,000 | - | 1.1 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,2-Dichloroethane | 0.02 | 2.3 | 3.1 | 30 | 60 | 10 | 0.02 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,2-Dichloropropane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,3,5-Trimethylbenzene | 8.4 | 47 | 52 | 190 | 380 | - | 8.4 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| 1,3-Dichlorobenzene | 2.4 | 17 | 49 | 280 | 560 | - | 0.19 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,4-Dichlorobenzene | 1.8 | 9.8 | 13 | 130 | 250 | 20 | 1.8 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 1,4-Dioxane | 0.1 | 9.8 | 13 | 130 | 250 | 0.1 | 0.1 | U | 0.13 | | U | 0.11 | | U | 0.11 | | U | 0.13 | | U | 0.12 | | U | 0.12 | | U | 0.12 | | U | 0.099 | |
| 2-Butanone | 0.12 | 100 | 100 | 500 | 1,000 | 100 | 0.12 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 2-Hexanone | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| 4-Isopropyltoluene | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| 4-Methyl-2-pentanone | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Acetone | 0.05 | 100 | 100 | 500 | 1,000 | 2.2 | 0.05 | U | 0.013 | | U | 0.011 | | U | 0.011 | | U | 0.013 | | U | 0.012 | | U | 0.012 | | U | 0.012 | | U | 0.0099 | |
| Benzene | 0.06 | 2.9 | 4.8 | 44 | 89 | 70 | 0.06 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| Bromochloromethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Bromodichloromethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Bromoform | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Bromomethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Carbon disulfide | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Carbon tetrachloride | 0.76 | 1.4 | 2.4 | 22 | 44 | - | 0.76 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Chlorobenzene | 1.1 | 100 | 100 | 500 | 1,000 | 40 | 1.1 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Chloroethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Chloroform | 0.37 | 10 | 49 | 350 | 700 | 12 | 0.37 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Chloromethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| cis-1,2-Dichloroethene | 0.25 | 59 | 100 | 500 | 1,000 | - | 0.25 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| cis-1,3-Dichloropropene | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Cyclohexane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Dibromochloromethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Dichlorodifluoromethane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Ethylbenzene | 1 | 30 | 41 | 390 | 780 | - | 1 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| Isopropylbenzene | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| m&p-Xylenes | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| Methyl Acetate | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Methylcyclohexane | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Methylene chloride | 0.05 | 51 | 100 | 500 | 1,000 | 12 | 0.05 | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| Methyl-t-butyl ether | 0.93 | 62 | 100 | 500 | 1,000 | - | 0.93 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| n-Butylbenzene | 12 | - | - | - | - | - | - | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| n-Propylbenzene | 3.9 | 100 | 100 | 500 | 1,000 | - | 3.9 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| o-Xylene | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| sec-Butylbenzene | 11 | 100 | 100 | 500 | 1,000 | - | 11 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |
| Styrene | - | - | - | - | - | - | - | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 | |
| t-Butylbenzene | 5.9 | 100 | 100 | 500 | 1,000 | - | 5.9 | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 | |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-9A | | | SB-9B | | | SB-10 | | | SB-11 A | | | SB-11 B | | | SB-12 | | | SB-13A | | | SB-13B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-005 | | | AC98694-006 | | | AC98694-008 | | | AC98711-006 | | | AC98711-007 | | | AC98694-010 | | | AC98694-011 | | | AC98694-012 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.0-8.5 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 1.3 | 5.5 | 19 | 150 | 300 | 2 | 1.3 | | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 |
| Toluene | 0.7 | 100 | 100 | 500 | 1,000 | 36 | 0.7 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 |
| trans-1,2-Dichloroethene | 0.19 | 100 | 100 | 500 | 1,000 | - | 0.19 | | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 |
| trans-1,3-Dichloropropene | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 |
| Trichloroethene | 0.47 | 10 | 21 | 200 | 400 | 2 | 0.47 | | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 |
| Trichlorofluoromethane | - | - | - | - | - | - | - | | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 |
| Vinyl chloride | 0.02 | 0.21 | 0.90 | 13 | 27 | - | 0.02 | | U | 0.0025 | | U | 0.0021 | | U | 0.0023 | | U | 0.0025 | | U | 0.0024 | | U | 0.0023 | | U | 0.0024 | | U | 0.0020 |
| Xylenes (Total) | 0.26 | 100 | 100 | 500 | 1,000 | 0.26 | 1.6 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | | U | 0.0013 | | U | 0.0012 | | U | 0.0012 | | U | 0.0012 | | U | 0.0010 |
| Total VOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| **Semi-Volatile Organic Compounds (SVOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1'-Biphenyl | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 1,2,4,5-Tetrachlorobenzene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,3,4,6-Tetrachlorophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4,5-Trichlorophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4,6-Trichlorophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dichlorophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dimethylphenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dinitrophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,4-Dinitrotoluene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2,6-Dinitrotoluene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Chloronaphthalene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Chlorophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Methylnaphthalene | - | - | - | - | - | - | - | | U | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.042 | | U | 0.039 |
| 2-Methylphenol | 0.33 | 100 | 100 | 500 | 1000 | - | 0.33 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Nitroaniline | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 2-Nitrophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 3&4-Methylphenol | 34* | 34* | 100 | 500 | 1000 | - | 0.33 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 3,3'-Dichlorobenzidine | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 3-Nitroaniline | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4,6-Dinitro-2-methylphenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Bromophenyl-phenylether | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Chloro-3-methylphenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Chloroaniline | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Chlorophenyl-phenylether | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Nitroaniline | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| 4-Nitrophenol | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Acenaphthene | 20 | 100 | 100 | 500 | 1000 | 20 | 98 | | U | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.042 | | U | 0.039 |
| Acenaphthylene | 100 | 100 | 100 | 500 | 1000 | - | 107 | 0.06 | | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.042 | | U | 0.039 |
| Acetophenone | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Anthracene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 0.22 | | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.042 | | U | 0.039 |
| Atrazine | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Benzaldehyde | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Benzo[a]anthracene | 1 | 1 | 1 | 5.6 | 11 | - | 1 | 1.3 | | 0.039 | | U | 0.039 | | U | 0.039 | 0.042 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.091 | | 0.042 | | U | 0.039 |
| Benzo[a]pyrene | 1 | 1 | 1 | 1 | 1.1 | 2.6 | 22 | ***1.2*** | | 0.039 | | U | 0.039 | | U | 0.039 | 0.043 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.092 | | 0.042 | | U | 0.039 |
| Benzo[b]fluoranthene | 1 | 1 | 1 | 5.6 | 11 | - | 1.7 | ***1.7*** | | 0.039 | | U | 0.039 | | U | 0.039 | 0.056 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.14 | | 0.042 | | U | 0.039 |
| Benzo[g,h,i]perylene | 100 | 100 | 100 | 500 | 1000 | - | 1.7 | 0.75 | | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | 0.068 | | 0.042 | | U | 0.039 |
| Benzo[k]fluoranthene | 0.8 | 1 | 3.9 | 56 | 100 | - | 1.7 | 0.43 | | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | 0.051 | | 0.042 | | U | 0.039 |
| bis(2-Chloroethoxy)methane | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| bis(2-Chloroethyl)ether | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| bis(2-Chloroisopropyl)ether | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| bis(2-Ethylhexyl)phthalate | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Butylbenzylphthalate | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-9A | | | SB-9B | | | SB-10 | | | SB-11 A | | | SB-11 B | | | SB-12 | | | SB-13A | | | SB-13B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-005 | | | AC98694-006 | | | AC98694-008 | | | AC98711-006 | | | AC98711-007 | | | AC98694-010 | | | AC98694-011 | | | AC98694-012 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.0-8.5 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Semi-Volatile Organic Compounds (SVOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Caprolactam | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Carbazole | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Chrysene | 1 | 1 | 3.9 | 56 | 110 | - | 1 | 1.2 | | 0.039 | | U | 0.039 | | U | 0.039 | 0.044 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.11 | | 0.042 | | U | 0.039 |
| Dibenzo[a,h]anthracene | 0.33 | 0.33 | 0.33 | 0.56 | 1.1 | - | 1000 | 0.27 | | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.042 | | U | 0.039 |
| Dibenzofuran | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Diethylphthalate | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Dimethylphthalate | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Di-n-butylphthalate | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Di-n-octylphthalate | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Fluoranthene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 2.6 | | 0.039 | | U | 0.039 | | U | 0.039 | 0.075 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.18 | | 0.042 | | U | 0.039 |
| Fluorene | 30 | 100 | 100 | 500 | 1000 | 30 | 386 | | U | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | | U | 0.042 | | U | 0.039 |
| Hexachlorobenzene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Hexachlorobutadiene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Hexachlorocyclopentadiene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Hexachloroethane | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Indeno[1,2,3-cd]pyrene | 0.5 | 0.5 | 0.5 | 5.6 | 11 | - | 8.2 | ***0.74*** | | 0.039 | | U | 0.039 | | U | 0.039 | | U | 0.038 | | U | 0.039 | | U | 0.039 | 0.06 | | 0.042 | | U | 0.039 |
| Isophorone | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Naphthalene | 12 | 100 | 100 | 500 | 1000 | - | 12 | | U | 0.0098 | | U | 0.0097 | | U | 0.0097 | | U | 0.0095 | | U | 0.0098 | | U | 0.0098 | | U | 0.011 | | U | 0.0097 |
| Nitrobenzene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| N-Nitroso-di-n-propylamine | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| N-Nitrosodiphenylamine | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Pentachlorophenol | 0.8 | 100 | 100 | 500 | 1000 | - | 1000 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Phenanthrene | 100 | 100 | 100 | 50 | 1000 | - | 1000 | 0.93 | | 0.039 | | U | 0.039 | | U | 0.039 | 0.039 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.085 | | 0.042 | | U | 0.039 |
| Phenol | 0.33 | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Pyrene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 2.6 | | 0.039 | | U | 0.039 | | U | 0.039 | 0.078 | | 0.038 | | U | 0.039 | | U | 0.039 | 0.18 | | 0.042 | | U | 0.039 |
| Total SVOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

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**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-9A | | | SB-9B | | | SB-10 | | | SB-11 A | | | SB-11 B | | | SB-12 | | | SB-13A | | | SB-13B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-005 | | | AC98694-006 | | | AC98694-008 | | | AC98711-006 | | | AC98711-007 | | | AC98694-010 | | | AC98694-011 | | | AC98694-012 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.0-8.5 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Metals** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Antimony | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Arsenic | 13 | 16 | 16 | 16 | 16 | 13 | 16 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Barium | 350 | 350 | 400 | 400 | 10,000 | 433 | 820 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Beryllium | 7.2 | 14 | 72 | 590 | 2,700 | 10 | 47 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Cadmium | 2.5 | 2.5 | 4.3 | 9.3 | 60 | 4 | 7.5 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Calcium | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Total Chromium* | 30/1 | 36/22 | 180/110 | 1,500/400 | 6,800/800 | 41/1 | -/19 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Cobalt | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Copper | 50 | 270 | 270 | 270 | 10,000 | 50 | 1,720 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Iron | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Lead | 63 | 400 | 400 | 1,000 | 3,900 | 63 | 450 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Magnesium | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Manganese | 1,600 | 2,000 | 2,000 | 10,000 | 10,000 | 1,600 | 2,000 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Total Mercury | 0.18 | 0.81 | 0.81 | 2.8 | 5.7 | 0.18 | 0.73 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Nickel | 30 | 140 | 310 | 310 | 10,000 | 30 | 130 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Potassium | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Selenium | 3.9 | 36 | 180 | 1,500 | 6,800 | 3.9 | 4 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Silver | 2 | 36 | 180 | 1,500 | 6,800 | 2 | 8.3 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Sodium | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Thallium | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Vanadium | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Zinc | 109 | 3,300 | 10,000 | 10,000 | 10,000 | 109 | 2,480 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| **Pesticides** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a-Chlordane | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Aldrin | 0.01 | 0.02 | 0.10 | 0.68 | 1.40 | 0.14 | 0.19 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Alpha-BHC | 0.02 | 0.10 | 0.48 | 3.40 | 6.80 | 0.04 | 0.02 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| beta-BHC | 0.04 | 0.07 | 0.36 | 3 | 14 | 0.6 | 0.09 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Chlordane (Total) | 0.09 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| delta-BHC | 0.04 | 100 | 100 | 500 | 1,000 | 0.04 | 0.25 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Dieldrin | 0.01 | 0.04 | 0.2 | 1.40 | 2.8 | 0.01 | 0.1 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan I | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan II | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan Sulfate | 2.4 | 4.8 | 24 | 200 | 920 | - | 1,000 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin | 0.01 | 2.2 | 11 | 89 | 410 | 0.01 | 0.06 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin Aldehyde | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin Ketone | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| gamma-BHC | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Heptachlor | 0.04 | 0.42 | 2.1 | 15 | 29 | 0.14 | 0.38 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Heptachlor Epoxide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Methoxychlor | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDD | 0.0033 | 2.6 | 13 | 92 | 180 | 0.0033 | 14 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDE | 0.0033 | 1.8 | 8.9 | 62 | 120 | 0.0033 | 17 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDT | 0.0033 | 1.7 | 7.9 | 47 | 94 | 0.0033 | 136 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Toxaphene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| y-Chlordane | 0.094 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

# TABLE 1
## Soil Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-9A | | | SB-9B | | | SB-10 | | | SB-11 A | | | SB-11 B | | | SB-12 | | | SB-13A | | | SB-13B | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98694-005 | | | AC98694-006 | | | AC98694-008 | | | AC98711-006 | | | AC98711-007 | | | AC98694-010 | | | AC98694-011 | | | AC98694-012 | | |
| Date | | | | | | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.5-9.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 8.0-8.5 | | | 0.5-1.0 | | | 8.0-8.5 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Polychlroinated Biphenyls (PCBs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aroclor (Total) | 0.1 | 1 | 1 | 1 | 25 | 1 | 3.2 | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1016 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1221 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1232 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1242 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1248 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1254 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1260 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1262 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| Aroclor-1268 | - | - | - | - | - | - | - | | U | 0.029 | | U | 0.029 | | U | 0.029 | | U | 0.028 | | U | 0.029 | | U | 0.029 | | U | 0.032 | | U | 0.029 |
| **Additional Analysis** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

**Notes:**

Q = Data Qualifier
J = Estimated Value
U = Not Detected
RL = Reporting Limit
NA = Not Analyzed
All concentrations are in milligrams per kilogram (mg/kg)
**140** = concentration exceeds Protection of Groundwater Soil Cleanup Objective
***140*** = concentration exceeds Unrestricted Use Soil Cleanup Objective
**10** = reporting limit exceeds most stringent Soil Cleanup Objective
* = The SCOs listed for Total Chromium are the trivalent chromium SCOs and hexavalent chromium SCOs, respectively, as total chromium does not have an established SCO.

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-14A | | | SB-14B | | | SB-15 | | | SB-16 | | | SB-17 | | | SB-18 | | | SB-19 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98737-004 | | | AC98737-006 | | | AC98694-004 | | | AC98694-007 | | | AC98737-005 | | | AC98711-002 | | | AC98711-008 | | |
| Date | | | | | | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/28/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 1.5-2.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 7.0-7.5 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.68 | 100 | 100 | 500 | 1,000 | - | 0.68 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,1,2,2-Tetrachloroethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,1,2-Trichloroethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,1-Dichloroethane | 0.27 | 19 | 26 | 240 | 480 | - | 0.27 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,1-Dichloroethene | 0.33 | 100 | 100 | 500 | 1,000 | - | 0.33 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,2,3-Trichlorobenzene | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,2,4-Trichlorobenzene | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,2,4-Trimethylbenzene | 3.6 | 47 | 52 | 190 | 380 | - | 3.6 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| 1,2-Dibromo-3-chloropropane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,2-Dibromoethane | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| 1,2-Dichlorobenzene | 1.10 | 100 | 100 | 500 | 1,000 | - | 1.1 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,2-Dichloroethane | 0.02 | 2.3 | 3.1 | 30 | 60 | 10 | 0.02 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,2-Dichloropropane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,3,5-Trimethylbenzene | 8.4 | 47 | 52 | 190 | 380 | - | 8.4 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| 1,3-Dichlorobenzene | 2.4 | 17 | 49 | 280 | 560 | - | 0.19 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,4-Dichlorobenzene | 1.8 | 9.8 | 13 | 130 | 250 | 20 | 1.8 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 1,4-Dioxane | 0.1 | 9.8 | 13 | 130 | 250 | 0.1 | 0.1 | U | 0.13 | | U | 0.14 | | U | 0.14 | | U | 0.11 | | U | 0.13 | | U | 0.11 | | U | 0.11 | |
| 2-Butanone | 0.12 | 100 | 100 | 500 | 1,000 | 100 | 0.12 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 2-Hexanone | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| 4-Isopropyltoluene | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| 4-Methyl-2-pentanone | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Acetone | 0.05 | 100 | 100 | 500 | 1,000 | 2.2 | 0.05 | U | 0.013 | | U | 0.014 | | U | 0.014 | | U | 0.011 | | U | 0.013 | | U | 0.011 | | U | 0.011 | |
| Benzene | 0.06 | 2.9 | 4.8 | 44 | 89 | 70 | 0.06 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| Bromochloromethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Bromodichloromethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Bromoform | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Bromomethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Carbon disulfide | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Carbon tetrachloride | 0.76 | 1.4 | 2.4 | 22 | 44 | - | 0.76 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Chlorobenzene | 1.1 | 100 | 100 | 500 | 1,000 | 40 | 1.1 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Chloroethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Chloroform | 0.37 | 10 | 49 | 350 | 700 | 12 | 0.37 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Chloromethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| cis-1,2-Dichloroethene | 0.25 | 59 | 100 | 500 | 1,000 | - | 0.25 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| cis-1,3-Dichloropropene | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Cyclohexane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Dibromochloromethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Dichlorodifluoromethane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Ethylbenzene | 1 | 30 | 41 | 390 | 780 | - | 1 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| Isopropylbenzene | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| m&p-Xylenes | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| Methyl Acetate | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Methylcyclohexane | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Methylene chloride | 0.05 | 51 | 100 | 500 | 1,000 | 12 | 0.05 | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| Methyl-t-butyl ether | 0.93 | 62 | 100 | 500 | 1,000 | - | 0.93 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| n-Butylbenzene | 12 | - | - | - | - | - | - | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| n-Propylbenzene | 3.9 | 100 | 100 | 500 | 1,000 | - | 3.9 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| o-Xylene | - | - | - | - | - | - | - | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| sec-Butylbenzene | 11 | 100 | 100 | 500 | 1,000 | - | 11 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |
| Styrene | - | - | - | - | - | - | - | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 | |
| t-Butylbenzene | 5.9 | 100 | 100 | 500 | 1,000 | - | 5.9 | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 | |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-14A | | | SB-14B | | | SB-15 | | | SB-16 | | | SB-17 | | | SB-18 | | | SB-19 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98737-004 | | | AC98737-006 | | | AC98694-004 | | | AC98694-007 | | | AC98737-005 | | | AC98711-002 | | | AC98711-008 | | |
| Date | | | | | | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/28/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 1.5-2.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 7.0-7.5 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 1.3 | 5.5 | 19 | 150 | 300 | 2 | 1.3 | | U | 0.0026 | 0.0035 | | 0.0027 | 0.0028 | | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 |
| Toluene | 0.7 | 100 | 100 | 500 | 1,000 | 36 | 0.7 | | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 |
| trans-1,2-Dichloroethene | 0.19 | 100 | 100 | 500 | 1,000 | - | 0.19 | | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 |
| trans-1,3-Dichloropropene | - | - | - | - | - | - | - | | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 |
| Trichloroethene | 0.47 | 10 | 21 | 200 | 400 | 2 | 0.47 | | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 |
| Trichlorofluoromethane | - | - | - | - | - | - | - | | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 |
| Vinyl chloride | 0.02 | 0.21 | 0.90 | 13 | 27 | - | 0.02 | | U | 0.0026 | | U | 0.0027 | | U | 0.0028 | | U | 0.0022 | | U | 0.0027 | | U | 0.0021 | | U | 0.0023 |
| Xylenes (Total) | 0.26 | 100 | 100 | 500 | 1,000 | 0.26 | 1.6 | | U | 0.0013 | | U | 0.0014 | | U | 0.0014 | | U | 0.0011 | | U | 0.0013 | | U | 0.0011 | | U | 0.0011 |
| Total VOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| **Semi-Volatile Organic Compounds (SVOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1'-Biphenyl | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 1,2,4,5-Tetrachlorobenzene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2,3,4,6-Tetrachlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2,4,5-Trichlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2,4,6-Trichlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2,4-Dichlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| 2,4-Dimethylphenol | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| 2,4-Dinitrophenol | - | - | - | - | - | - | - | NA | | | | U | 0.99 | NA | | | NA | | | NA | | | | U | 0.2 | | U | 0.19 |
| 2,4-Dinitrotoluene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2,6-Dinitrotoluene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2-Chloronaphthalene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2-Chlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2-Methylnaphthalene | - | - | - | - | - | - | - | | U | 0.038 | | U | 0.2 | | U | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | | U | 0.037 |
| 2-Methylphenol | 0.33 | 100 | 100 | 500 | 1000 | - | 0.33 | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| 2-Nitroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 2-Nitrophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 3&4-Methylphenol | 34* | 34* | 100 | 500 | 1000 | - | 0.33 | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| 3,3'-Dichlorobenzidine | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 3-Nitroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 4,6-Dinitro-2-methylphenol | - | - | - | - | - | - | - | NA | | | | U | 0.99 | NA | | | NA | | | NA | | | | U | 0.2 | | U | 0.19 |
| 4-Bromophenyl-phenylether | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 4-Chloro-3-methylphenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 4-Chloroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| 4-Chlorophenyl-phenylether | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 4-Nitroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| 4-Nitrophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Acenaphthene | 20 | 100 | 100 | 500 | 1000 | 20 | 98 | 0.053 | | 0.038 | | U | 0.2 | 0.075 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.074 | | 0.037 |
| Acenaphthylene | 100 | 100 | 100 | 500 | 1000 | - | 107 | | U | 0.038 | | U | 0.2 | 0.069 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | | U | 0.037 |
| Acetophenone | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Anthracene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 0.11 | | 0.038 | | U | 0.2 | 0.14 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.25 | | 0.037 |
| Atrazine | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Benzaldehyde | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Benzo[a]anthracene | 1 | 1 | 1 | 5.6 | 11 | - | 1 | 0.51 | | 0.038 | 0.61 | | 0.2 | 0.61 | | 0.039 | 0.038 | | 0.038 | | U | 0.041 | | U | 0.039 | 0.59 | | 0.037 |
| Benzo[a]pyrene | 1 | 1 | 1 | 1 | 1.1 | 2.6 | 22 | 0.48 | | 0.038 | 0.61 | | 0.2 | 0.6 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.51 | | 0.037 |
| Benzo[b]fluoranthene | 1 | 1 | 1 | 5.6 | 11 | - | 1.7 | 0.69 | | 0.038 | 0.86 | | 0.2 | 0.9 | | 0.039 | 0.048 | | 0.038 | | U | 0.041 | | U | 0.039 | 0.69 | | 0.037 |
| Benzo[g,h,i]perylene | 100 | 100 | 100 | 500 | 1000 | - | 1.7 | 0.33 | | 0.038 | 0.45 | | 0.2 | 0.42 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.36 | | 0.037 |
| Benzo[k]fluoranthene | 0.8 | 1 | 3.9 | 56 | 100 | - | 1.7 | 0.22 | | 0.038 | 0.29 | | 0.2 | 0.28 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.18 | | 0.037 |
| bis(2-Chloroethoxy)methane | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| bis(2-Chloroethyl)ether | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| bis(2-Chloroisopropyl)ether | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| bis(2-Ethylhexyl)phthalate | - | - | - | - | - | - | - | NA | | | 0.51 | | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Butylbenzylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-14A | | | SB-14B | | | SB-15 | | | SB-16 | | | SB-17 | | | SB-18 | | | SB-19 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98737-004 | | | AC98737-006 | | | AC98694-004 | | | AC98694-007 | | | AC98737-005 | | | AC98711-002 | | | AC98711-008 | | |
| Date | | | | | | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/28/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 1.5-2.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 7.0-7.5 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Semi-Volatile Organic Compounds (SVOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Caprolactam | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Carbazole | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | 0.053 | | 0.037 |
| Chrysene | 1 | 1 | 3.9 | 56 | 110 | - | 1 | 0.54 | | 0.038 | 0.71 | | 0.2 | 0.71 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.53 | | 0.037 |
| Dibenzo[a,h]anthracene | 0.33 | 0.33 | 0.33 | 0.56 | 1.1 | - | 1000 | 0.12 | | 0.038 | | U | 0.2 | 0.15 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.089 | | 0.037 |
| Dibenzofuran | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | 0.045 | | 0.0094 |
| Diethylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Dimethylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Di-n-butylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| Di-n-octylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Fluoranthene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 0.95 | | 0.038 | 1.2 | | 0.2 | 1.2 | | 0.039 | 0.065 | | 0.038 | | U | 0.041 | | U | 0.039 | 1.4 | | 0.037 |
| Fluorene | 30 | 100 | 100 | 500 | 1000 | 30 | 386 | 0.038 | | 0.038 | | U | 0.2 | 0.059 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.047 | | 0.037 |
| Hexachlorobenzene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Hexachlorobutadiene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Hexachlorocyclopentadiene | - | - | - | - | - | - | - | NA | | | | U | 0.47 | NA | | | NA | | | NA | | | | U | 0.092 | | U | 0.088 |
| Hexachloroethane | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Indeno[1,2,3-cd]pyrene | 0.5 | 0.5 | 0.5 | 5.6 | 11 | - | 8.2 | 0.31 | | 0.038 | 0.42 | | 0.2 | 0.39 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 0.33 | | 0.037 |
| Isophorone | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Naphthalene | 12 | 100 | 100 | 500 | 1000 | - | 12 | 0.014 | | 0.0095 | | U | 0.05 | 0.023 | | 0.0097 | | U | 0.0095 | | U | 0.01 | | U | 0.098 | | U | 0.0094 |
| Nitrobenzene | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| N-Nitroso-di-n-propylamine | - | - | - | - | - | - | - | NA | | | | U | 0.05 | NA | | | NA | | | NA | | | | U | 0.0098 | | U | 0.0094 |
| N-Nitrosodiphenylamine | - | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Pentachlorophenol | 0.8 | 100 | 100 | 500 | 1000 | - | 1000 | NA | | | | U | 0.99 | NA | | | NA | | | NA | | | | U | 0.2 | | U | 0.19 |
| Phenanthrene | 100 | 100 | 100 | 50 | 1000 | - | 1000 | 0.58 | | 0.038 | 0.55 | | 0.2 | 0.73 | | 0.039 | | U | 0.038 | | U | 0.041 | | U | 0.039 | 1.1 | | 0.037 |
| Phenol | 0.33 | - | - | - | - | - | - | NA | | | | U | 0.2 | NA | | | NA | | | NA | | | | U | 0.039 | | U | 0.037 |
| Pyrene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 0.98 | | 0.038 | 1.1 | | 0.2 | 1.3 | | 0.039 | 0.065 | | 0.038 | | U | 0.041 | | U | 0.039 | 1.4 | | 0.037 |
| Total SVOC TICs | - | - | - | - | - | - | - | NA | | | 24 | J | | NA | | | NA | | | NA | | | NA | | | NA | | |

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**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-14A | | | SB-14B | | | SB-15 | | | SB-16 | | | SB-17 | | | SB-18 | | | SB-19 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98737-004 | | | AC98737-006 | | | AC98694-004 | | | AC98694-007 | | | AC98737-005 | | | AC98711-002 | | | AC98711-008 | | |
| Date | | | | | | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/28/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 1.5-2.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 7.0-7.5 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Metals** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | - | - | - | - | - | - | - | NA | | | 8,900 | | 240 | NA | | | NA | | | NA | | | 20,000 | | 240 | 8,900 | | 220 |
| Antimony | - | - | - | - | - | - | - | NA | | | | U | 0.95 | NA | | | NA | | | NA | | | | U | 0.94 | | U | 0.9 |
| Arsenic | 13 | 16 | 16 | 16 | 16 | 13 | 16 | NA | | | 7.9 | | 0.24 | NA | | | NA | | | NA | | | 1.6 | | 0.24 | 3.8 | | 0.22 |
| Barium | 350 | 350 | 400 | 400 | 10,000 | 433 | 820 | NA | | | 320 | | 12 | NA | | | NA | | | NA | | | 120 | | 12 | 60 | | 11 |
| Beryllium | 7.2 | 14 | 72 | 590 | 2,700 | 10 | 47 | NA | | | 0.48 | | 0.24 | NA | | | NA | | | NA | | | 0.32 | | 0.24 | 0.32 | | 0.22 |
| Cadmium | 2.5 | 2.5 | 4.3 | 9.3 | 60 | 4 | 7.5 | NA | | | ***3.7*** | | 0.48 | NA | | | NA | | | NA | | | | U | 0.47 | | U | 0.45 |
| Calcium | - | - | - | - | - | - | - | NA | | | 21,000 | | 1200 | NA | | | NA | | | NA | | | 3,300 | | 1,200 | | U | 1,100 |
| Total Chromium* | 30/1 | 36/22 | 180/110 | 1,500/400 | 6,800/800 | 41/1 | -/19 | NA | | | **36** | | 6 | NA | | | NA | | | NA | | | **31** | | 5.9 | ***13*** | | 5.6 |
| Cobalt | - | - | - | - | - | - | - | NA | | | 7.6 | | 3 | NA | | | NA | | | NA | | | 12 | | 2.9 | 5.9 | | 2.8 |
| Copper | 50 | 270 | 270 | 270 | 10,000 | 50 | 1,720 | NA | | | **4,900** | | 6 | NA | | | NA | | | NA | | | 38 | | 5.9 | 24 | | 5.6 |
| Iron | - | - | - | - | - | - | - | NA | | | 16,000 | | 240 | NA | | | NA | | | NA | | | 30,000 | | 240 | 14,000 | | 220 |
| Lead | 63 | 400 | 400 | 1,000 | 3,900 | 63 | 450 | NA | | | **720** | | 6 | NA | | | NA | | | NA | | | 20 | | 5.9 | ***130*** | | 5.6 |
| Magnesium | - | - | - | - | - | - | - | NA | | | 4,800 | | 600 | NA | | | NA | | | NA | | | 6,000 | | 590 | 2,400 | | 560 |
| Manganese | 1,600 | 2,000 | 2,000 | 10,000 | 10,000 | 1,600 | 2,000 | NA | | | 300 | | 12 | NA | | | NA | | | NA | | | ***1,800*** | | 12 | 310 | | 11 |
| Total Mercury | 0.18 | 0.81 | 0.81 | 2.8 | 5.7 | 0.18 | 0.73 | NA | | | **3** | | 0.099 | NA | | | NA | | | NA | | | | U | 0.098 | ***0.33*** | | 0.094 |
| Nickel | 30 | 140 | 310 | 310 | 10,000 | 30 | 130 | NA | | | 20 | | 6 | NA | | | NA | | | NA | | | 29 | | 5.9 | 12 | | 5.6 |
| Potassium | - | - | - | - | - | - | - | NA | | | 890 | | 600 | NA | | | NA | | | NA | | | 1,800 | | 590 | 720 | | 560 |
| Selenium | 3.9 | 36 | 180 | 1,500 | 6,800 | 3.9 | 4 | NA | | | | U | 2.4 | NA | | | NA | | | NA | | | | U | 2.4 | | U | 2.2 |
| Silver | 2 | 36 | 180 | 1,500 | 6,800 | 2 | 8.3 | NA | | | 0.54 | | 0.24 | NA | | | NA | | | NA | | | | U | 0.24 | | U | 0.22 |
| Sodium | - | - | - | - | - | - | - | NA | | | | U | 300 | NA | | | NA | | | NA | | | | U | 290 | | U | 280 |
| Thallium | - | - | - | - | - | - | - | NA | | | | U | 0.48 | NA | | | NA | | | NA | | | | U | 0.47 | | U | 0.45 |
| Vanadium | - | - | - | - | - | - | - | NA | | | 39 | | 12 | NA | | | NA | | | NA | | | 40 | | 12 | 15 | | 11 |
| Zinc | 109 | 3,300 | 10,000 | 10,000 | 10,000 | 109 | 2,480 | NA | | | ***580*** | | 12 | NA | | | NA | | | NA | | | 75 | | 12 | 69 | | 11 |
| **Pesticides** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a-Chlordane | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Aldrin | 0.01 | 0.02 | 0.10 | 0.68 | 1.40 | 0.14 | 0.19 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Alpha-BHC | 0.02 | 0.10 | 0.48 | 3.40 | 6.80 | 0.04 | 0.02 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| beta-BHC | 0.04 | 0.07 | 0.36 | 3 | 14 | 0.6 | 0.09 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Chlordane (Total) | 0.09 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| delta-BHC | 0.04 | 100 | 100 | 500 | 1,000 | 0.04 | 0.25 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Dieldrin | 0.01 | 0.04 | 0.2 | 1.40 | 2.8 | 0.01 | 0.1 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan I | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan II | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endosulfan Sulfate | 2.4 | 4.8 | 24 | 200 | 920 | - | 1,000 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin | 0.01 | 2.2 | 11 | 89 | 410 | 0.01 | 0.06 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin Aldehyde | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Endrin Ketone | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| gamma-BHC | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Heptachlor | 0.04 | 0.42 | 2.1 | 15 | 29 | 0.14 | 0.38 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Heptachlor Epoxide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Methoxychlor | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDD | 0.0033 | 2.6 | 13 | 92 | 180 | 0.0033 | 14 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDE | 0.0033 | 1.8 | 8.9 | 62 | 120 | 0.0033 | 17 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| p,p'-DDT | 0.0033 | 1.7 | 7.9 | 47 | 94 | 0.0033 | 136 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| Toxaphene | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |
| y-Chlordane | 0.094 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

# TABLE 1
## Soil Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-14A | | | SB-14B | | | SB-15 | | | SB-16 | | | SB-17 | | | SB-18 | | | SB-19 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98737-004 | | | AC98737-006 | | | AC98694-004 | | | AC98694-007 | | | AC98737-005 | | | AC98711-002 | | | AC98711-008 | | |
| Date | | | | | | | | 6/29/2017 | | | 6/29/2017 | | | 6/27/2017 | | | 6/27/2017 | | | 6/29/2017 | | | 6/28/2017 | | | 6/27/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.5-1.0 | | | 1.5-2.0 | | | 0.5-1.0 | | | 0.5-1.0 | | | 8.0-8.5 | | | 7.0-7.5 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Polychlroinated Biphenyls (PCBs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aroclor (Total) | 0.1 | 1 | 1 | 1 | 25 | 1 | 3.2 | NA | | | ***0.16*** | | 0.03 | 0.04 | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1016 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1221 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1232 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1242 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1248 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1254 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1260 | - | - | - | - | - | - | - | NA | | | 0.16 | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1262 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | 0.04 | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| Aroclor-1268 | - | - | - | - | - | - | - | NA | | | U | | 0.03 | U | | 0.029 | U | | 0.028 | NA | | | U | | 0.029 | U | | 0.028 |
| **Additional Analysis** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | | NA | | |

**Notes:**

Q = Data Qualifier
U = Not Detected
NA = Not Analyzed
J = Estimated Value
RL = Reporting Limit
All concentrations are in milligrams per kilogram (mg/kg)
**140** = concentration exceeds Protection of Groundwater Soil Cleanup Objective
***140*** = concentration exceeds Unrestricted Use Soil Cleanup Objective
**10** = reporting limit exceeds most stringent Soil Cleanup Objective
* = The SCOs listed for Total Chromium are the trivalent chromium SCOs and hexavalent chromium SCOs, respectively, as total chromium does not have an established SCO.

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-20 | | | SB-21 | | | SB-22 | | | SB-23 | | | SB-24C | | | SB-24 | | | SB-25 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98711-003 | | | AC98711-004 | | | AC98711-009 | | | AC98711-001 | | | AC98737-008 | | | AC98737-009 | | | AC98737-007 | | |
| Date | | | | | | | | 6/28/2017 | | | 6/28/2017 | | | 6/27/2017 | | | 6/28/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/29/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.0-0.5 | | | 2.5-3.0 | | | 1.0-1.5 | | | 3.5-4.0 | | | Composite | | | 0.5-1.0 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | 0.68 | 100 | 100 | 500 | 1,000 | - | 0.68 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,1,2,2-Tetrachloroethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,1,2-Trichloroethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,1-Dichloroethane | 0.27 | 19 | 26 | 240 | 480 | - | 0.27 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,1-Dichloroethene | 0.33 | 100 | 100 | 500 | 1,000 | - | 0.33 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,2,3-Trichlorobenzene | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,2,4-Trichlorobenzene | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,2,4-Trimethylbenzene | 3.6 | 47 | 52 | 190 | 380 | - | 3.6 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| 1,2-Dibromo-3-chloropropane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,2-Dibromoethane | - | - | - | - | - | - | - | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| 1,2-Dichlorobenzene | 1.10 | 100 | 100 | 500 | 1,000 | - | 1.1 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,2-Dichloroethane | 0.02 | 2.3 | 3.1 | 30 | 60 | 10 | 0.02 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,2-Dichloropropane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,3,5-Trimethylbenzene | 8.4 | 47 | 52 | 190 | 380 | - | 8.4 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| 1,3-Dichlorobenzene | 2.4 | 17 | 49 | 280 | 560 | - | 0.19 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,4-Dichlorobenzene | 1.8 | 9.8 | 13 | 130 | 250 | 20 | 1.8 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 1,4-Dioxane | 0.1 | 9.8 | 13 | 130 | 250 | 0.1 | 0.1 | | U | 0.10 | | U | 0.13 | | U | 0.10 | | U | 0.11 | ND | | 0.12 | | U | 0.13 | | U | 0.12 |
| 2-Butanone | 0.12 | 100 | 100 | 500 | 1,000 | 100 | 0.12 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | 0.038 | | 0.0026 | | U | 0.0023 |
| 2-Hexanone | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| 4-Isopropyltoluene | - | - | - | - | - | - | - | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| 4-Methyl-2-pentanone | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Acetone | 0.05 | 100 | 100 | 500 | 1,000 | 2.2 | 0.05 | | U | 0.0096 | | U | 0.013 | | U | 0.010 | | U | 0.011 | ND | | 0.012 | **0.25** | | 0.013 | | U | 0.012 |
| Benzene | 0.06 | 2.9 | 4.8 | 44 | 89 | 70 | 0.06 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| Bromochloromethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Bromodichloromethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Bromoform | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Bromomethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Carbon disulfide | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | 0.006 | | 0.0026 | | U | 0.0023 |
| Carbon tetrachloride | 0.76 | 1.4 | 2.4 | 22 | 44 | - | 0.76 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Chlorobenzene | 1.1 | 100 | 100 | 500 | 1,000 | 40 | 1.1 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Chloroethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Chloroform | 0.37 | 10 | 49 | 350 | 700 | 12 | 0.37 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Chloromethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| cis-1,2-Dichloroethene | 0.25 | 59 | 100 | 500 | 1,000 | - | 0.25 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| cis-1,3-Dichloropropene | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Cyclohexane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Dibromochloromethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Dichlorodifluoromethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Ethylbenzene | 1 | 30 | 41 | 390 | 780 | - | 1 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| Isopropylbenzene | - | - | - | - | - | - | - | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| m&p-Xylenes | - | - | - | - | - | - | - | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| Methyl Acetate | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Methylcyclohexane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Methylene chloride | 0.05 | 51 | 100 | 500 | 1,000 | 12 | 0.05 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | 0.0096 | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Methyl-t-butyl ether | 0.93 | 62 | 100 | 500 | 1,000 | - | 0.93 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| n-Butylbenzene | 12 | - | - | - | - | - | - | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| n-Propylbenzene | 3.9 | 100 | 100 | 500 | 1,000 | - | 3.9 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| o-Xylene | - | - | - | - | - | - | - | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| sec-Butylbenzene | 11 | 100 | 100 | 500 | 1,000 | - | 11 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| Styrene | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | ND | | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| t-Butylbenzene | 5.9 | 100 | 100 | 500 | 1,000 | - | 5.9 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | ND | | 0.0012 | | U | 0.0013 | | U | 0.0012 |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-20 | | | SB-21 | | | SB-22 | | | SB-23 | | | SB-24C | | | SB-24 | | | SB-25 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98711-003 | | | AC98711-004 | | | AC98711-009 | | | AC98711-001 | | | AC98737-008 | | | AC98737-009 | | | AC98737-007 | | |
| Date | | | | | | | | 6/28/2017 | | | 6/28/2017 | | | 6/27/2017 | | | 6/28/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/29/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.0-0.5 | | | 2.5-3.0 | | | 1.0-1.5 | | | 3.5-4.0 | | | Composite | | | 0.5-1.0 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tetrachloroethene | 1.3 | 5.5 | 19 | 150 | 300 | 2 | 1.3 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | | ND | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Toluene | 0.7 | 100 | 100 | 500 | 1,000 | 36 | 0.7 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | | ND | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| trans-1,2-Dichloroethene | 0.19 | 100 | 100 | 500 | 1,000 | - | 0.19 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | | ND | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| trans-1,3-Dichloropropene | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | | ND | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Trichloroethene | 0.47 | 10 | 21 | 200 | 400 | 2 | 0.47 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | | ND | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Trichlorofluoromethane | - | - | - | - | - | - | - | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | | ND | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Vinyl chloride | 0.02 | 0.21 | 0.90 | 13 | 27 | - | 0.02 | | U | 0.0019 | | U | 0.0026 | | U | 0.002 | | U | 0.0022 | | ND | 0.0024 | | U | 0.0026 | | U | 0.0023 |
| Xylenes (Total) | 0.26 | 100 | 100 | 500 | 1,000 | 0.26 | 1.6 | | U | 0.0010 | | U | 0.0013 | | U | 0.001 | | U | 0.0011 | | ND | 0.0012 | | U | 0.0013 | | U | 0.0012 |
| Total VOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | 0.0050 | J | | NA | | | NA | | |
| **Semi-Volatile Organic Compounds (SVOCs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1'-Biphenyl | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 1,2,4,5-Tetrachlorobenzene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2,3,4,6-Tetrachlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2,4,5-Trichlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2,4,6-Trichlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2,4-Dichlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| 2,4-Dimethylphenol | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| 2,4-Dinitrophenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | | U | 0.19 | NA | | | | U | 0.2 | | U | 0.58 | NA | | |
| 2,4-Dinitrotoluene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2,6-Dinitrotoluene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2-Chloronaphthalene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2-Chlorophenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2-Methylnaphthalene | - | - | - | - | - | - | - | | U | 0.37 | | U | 0.04 | | U | 0.039 | | U | 0.04 | | U | 0.039 | | U | 0.12 | | U | 0.038 |
| 2-Methylphenol | 0.33 | 100 | 100 | 500 | 1000 | - | 0.33 | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| 2-Nitroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 2-Nitrophenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 3&4-Methylphenol | 34* | 34* | 100 | 500 | 1000 | - | 0.33 | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| 3,3'-Dichlorobenzidine | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 3-Nitroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 4,6-Dinitro-2-methylphenol | - | - | - | - | - | - | - | NA | | | | U | 0.2 | | U | 0.19 | NA | | | | U | 0.2 | | U | 0.58 | NA | | |
| 4-Bromophenyl-phenylether | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 4-Chloro-3-methylphenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 4-Chloroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| 4-Chlorophenyl-phenylether | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 4-Nitroaniline | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| 4-Nitrophenol | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Acenaphthene | 20 | 100 | 100 | 500 | 1000 | 20 | 98 | | U | 0.37 | | U | 0.04 | | U | 0.039 | | U | 0.04 | | U | 0.039 | | U | 0.12 | | U | 0.038 |
| Acenaphthylene | 100 | 100 | 100 | 500 | 1000 | - | 107 | | U | 0.37 | | U | 0.04 | | U | 0.039 | | U | 0.04 | | U | 0.039 | | U | 0.12 | | U | 0.038 |
| Acetophenone | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Anthracene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 0.54 | | 0.37 | | U | 0.04 | | U | 0.039 | 0.094 | | 0.04 | 0.098 | | 0.039 | | U | 0.12 | | U | 0.038 |
| Atrazine | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Benzaldehyde | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Benzo[a]anthracene | 1 | 1 | 1 | 5.6 | 11 | - | 1 | **1.7** | | 0.37 | 0.086 | | 0.04 | | U | 0.039 | 0.24 | | 0.04 | 0.30 | | 0.039 | 0.55 | | 0.12 | | U | 0.038 |
| Benzo[a]pyrene | 1 | 1 | 1 | 1 | 1.1 | 2.6 | 22 | ***1.5*** | | 0.37 | 0.074 | | 0.04 | | U | 0.039 | 0.2 | | 0.04 | 0.28 | | 0.039 | 0.78 | | 0.12 | | U | 0.038 |
| Benzo[b]fluoranthene | 1 | 1 | 1 | 5.6 | 11 | - | 1.7 | **1.9** | | 0.37 | 0.1 | | 0.04 | | U | 0.039 | 0.26 | | 0.04 | 0.37 | | 0.039 | 0.64 | | 0.12 | 0.04 | | 0.038 |
| Benzo[g,h,i]perylene | 100 | 100 | 100 | 500 | 1000 | - | 1.7 | 1.2 | | 0.37 | 0.051 | | 0.04 | | U | 0.039 | 0.11 | | 0.04 | 0.18 | | 0.039 | 0.98 | | 0.12 | | U | 0.038 |
| Benzo[k]fluoranthene | 0.8 | 1 | 3.9 | 56 | 100 | - | 1.7 | 0.68 | | 0.37 | | U | 0.04 | | U | 0.039 | 0.086 | | 0.04 | 0.13 | | 0.039 | 0.21 | | 0.12 | | U | 0.038 |
| bis(2-Chloroethoxy)methane | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| bis(2-Chloroethyl)ether | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| bis(2-Chloroisopropyl)ether | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| bis(2-Ethylhexyl)phthalate | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | 0.33 | | 0.12 | NA | | |
| Butylbenzylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |

**TABLE 1**
**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-20 | | | SB-21 | | | SB-22 | | | SB-23 | | | SB-24C | | | SB-24 | | | SB-25 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98711-003 | | | AC98711-004 | | | AC98711-009 | | | AC98711-001 | | | AC98737-008 | | | AC98737-009 | | | AC98737-007 | | |
| Date | | | | | | | | 6/28/2017 | | | 6/28/2017 | | | 6/27/2017 | | | 6/28/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/29/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.0-0.5 | | | 2.5-3.0 | | | 1.0-1.5 | | | 3.5-4.0 | | | Composite | | | 0.5-1.0 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Semi-Volatile Organic Compounds (SVOCs) continued** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Caprolactam | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Carbazole | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | 0.046 | | 0.039 | | U | 0.12 | NA | | |
| Chrysene | 1 | 1 | 3.9 | 56 | 110 | - | 1 | **1.6** | | 0.37 | 0.094 | | 0.04 | | U | 0.039 | 0.23 | | 0.04 | 0.33 | | 0.039 | 0.82 | | 0.12 | | U | 0.038 |
| Dibenzo[a,h]anthracene | 0.33 | 0.33 | 0.33 | 0.56 | 1.1 | - | 1000 | | U | 0.37 | | U | 0.04 | | U | 0.039 | | U | 0.04 | 0.061 | | 0.039 | 0.23 | | 0.12 | | U | 0.038 |
| Dibenzofuran | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | 0.019 | | 0.0098 | | U | 0.029 | NA | | |
| Diethylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Dimethylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Di-n-butylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| Di-n-octylphthalate | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Fluoranthene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 3.8 | | 0.37 | 0.16 | | 0.04 | | U | 0.039 | 0.44 | | 0.04 | 0.60 | | 0.039 | 0.69 | | 0.12 | 0.053 | | 0.038 |
| Fluorene | 30 | 100 | 100 | 500 | 1000 | 30 | 386 | | U | 0.37 | | U | 0.04 | | U | 0.039 | | U | 0.04 | | U | 0.039 | | U | 0.12 | | U | 0.038 |
| Hexachlorobenzene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Hexachlorobutadiene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Hexachlorocyclopentadiene | - | - | - | - | - | - | - | NA | | | | U | 0.094 | | U | 0.091 | NA | | | | U | 0.092 | | U | 0.27 | NA | | |
| Hexachloroethane | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Indeno[1,2,3-cd]pyrene | 0.5 | 0.5 | 0.5 | 5.6 | 11 | - | 8.2 | ***0.98*** | | 0.37 | 0.045 | | 0.04 | | U | 0.039 | 0.095 | | 0.04 | 0.17 | | 0.039 | 0.39 | | 0.12 | | U | 0.038 |
| Isophorone | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Naphthalene | 12 | 100 | 100 | 500 | 1000 | - | 12 | | U | 0.093 | 0.01 | | 0.0099 | | U | 0.0097 | | U | 0.0099 | 0.020 | | 0.0098 | | U | 0.029 | | U | 0.0096 |
| Nitrobenzene | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| N-Nitroso-di-n-propylamine | - | - | - | - | - | - | - | NA | | | | U | 0.0099 | | U | 0.0097 | NA | | | | U | 0.0098 | | U | 0.029 | NA | | |
| N-Nitrosodiphenylamine | - | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Pentachlorophenol | 0.8 | 100 | 100 | 500 | 1000 | - | 1000 | NA | | | | U | 0.2 | | U | 0.19 | NA | | | | U | 0.2 | | U | 0.58 | NA | | |
| Phenanthrene | 100 | 100 | 100 | 50 | 1000 | - | 1000 | 2.8 | | 0.37 | 0.13 | | 0.04 | | U | 0.039 | 0.34 | | 0.04 | 0.41 | | 0.039 | 0.32 | | 0.12 | | U | 0.038 |
| Phenol | 0.33 | - | - | - | - | - | - | NA | | | | U | 0.04 | | U | 0.039 | NA | | | | U | 0.039 | | U | 0.12 | NA | | |
| Pyrene | 100 | 100 | 100 | 500 | 1000 | - | 1000 | 3.9 | | 0.37 | 0.18 | | 0.04 | | U | 0.039 | 0.48 | | 0.04 | 0.60 | | 0.039 | 0.76 | | 0.12 | 0.053 | | 0.038 |
| Total SVOC TICs | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | 20 | J | | NA | | | NA | | |

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**Soil Sampling Analytical Results**
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-20 | | | SB-21 | | | SB-22 | | | SB-23 | | | SB-24C | | | SB-24 | | | SB-25 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98711-003 | | | AC98711-004 | | | AC98711-009 | | | AC98711-001 | | | AC98737-008 | | | AC98737-009 | | | AC98737-007 | | |
| Date | | | | | | | | 6/28/2017 | | | 6/28/2017 | | | 6/27/2017 | | | 6/28/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/29/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.0-0.5 | | | 2.5-3.0 | | | 1.0-1.5 | | | 3.5-4.0 | | | Composite | | | 0.5-1.0 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Metals** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aluminum | - | - | - | - | - | - | - | NA | | | 11,000 | | 240 | 14,000 | | 230 | NA | | | 15,000 | | 240 | 16,000 | | 230 | 26,000 | | 230 |
| Antimony | - | - | - | - | - | - | - | NA | | | | U | 0.95 | | U | 0.93 | NA | | | | U | 0.94 | | U | 0.93 | | U | 0.92 |
| Arsenic | 13 | 16 | 16 | 16 | 16 | 13 | 16 | NA | | | **27** | | 0.24 | 2.6 | | 0.23 | NA | | | 3.2 | | 0.24 | 13 | | 0.23 | 6.2 | | 0.23 |
| Barium | 350 | 350 | 400 | 400 | 10,000 | 433 | 820 | NA | | | 110 | | 12 | 170 | | 12 | NA | | | 120 | | 12 | ***750*** | | 12 | 140 | | 11 |
| Beryllium | 7.2 | 14 | 72 | 590 | 2,700 | 10 | 47 | NA | | | 0.7 | | 0.24 | 0.28 | | 0.23 | NA | | | 0.43 | | 0.24 | 0.52 | | 0.23 | 0.5 | | 0.23 |
| Cadmium | 2.5 | 2.5 | 4.3 | 9.3 | 60 | 4 | 7.5 | NA | | | | U | 0.48 | | U | 0.47 | NA | | | | U | 0.47 | ***4.2*** | | 0.47 | | U | 0.46 |
| Calcium | - | - | - | - | - | - | - | NA | | | 6,700 | | 1,200 | 15,000 | | 1,200 | NA | | | 1,800 | | 1,200 | 36,000 | | 1,200 | 4,100 | | 1,100 |
| Total Chromium* | 30/1 | 36/22 | 180/110 | 1,500/400 | 6,800/800 | 41/1 | -/19 | NA | | | **30** | | 6 | **29** | | 5.8 | NA | | | **26** | | 5.9 | **45** | | 5.8 | **32** | | 5.7 |
| Cobalt | - | - | - | - | - | - | - | NA | | | 8.7 | | 3 | 8 | | 2.9 | NA | | | 9.1 | | 2.9 | 12 | | 2.9 | 14 | | 2.9 |
| Copper | 50 | 270 | 270 | 270 | 10,000 | 50 | 1,720 | NA | | | ***87*** | | 6 | 29 | | 5.8 | NA | | | 32 | | 5.9 | ***140*** | | 5.8 | 31 | | 5.7 |
| Iron | - | - | - | - | - | - | - | NA | | | 20,000 | | 240 | 21,000 | | 230 | NA | | | 24,000 | | 240 | 43,000 | | 230 | 39,000 | | 230 |
| Lead | 63 | 400 | 400 | 1,000 | 3,900 | 63 | 450 | NA | | | ***100*** | | 6 | ***280*** | | 5.8 | NA | | | ***290*** | | 5.9 | **4,300** | | 5.8 | ***260*** | | 5.7 |
| Magnesium | - | - | - | - | - | - | - | NA | | | 5,300 | | 600 | 11,000 | | 580 | NA | | | 4,200 | | 590 | 12,000 | | 580 | 6,700 | | 570 |
| Manganese | 1,600 | 2,000 | 2,000 | 10,000 | 10,000 | 1,600 | 2,000 | NA | | | 310 | | 12 | 290 | | 12 | NA | | | 300 | | 12 | 670 | | 12 | 930 | | 11 |
| Total Mercury | 0.18 | 0.81 | 0.81 | 2.8 | 5.7 | 0.18 | 0.73 | NA | | | **28** | | 2 | ***0.54*** | | 0.097 | NA | | | **1.4** | | 0.098 | **0.89** | | 0.097 | ***0.25*** | | 0.096 |
| Nickel | 30 | 140 | 310 | 310 | 10,000 | 30 | 130 | NA | | | 19 | | 6 | 20 | | 5.8 | NA | | | 20 | | 5.9 | ***36*** | | 5.8 | 28 | | 5.7 |
| Potassium | - | - | - | - | - | - | - | NA | | | 760 | | 600 | 1,300 | | 580 | NA | | | 1,300 | | 590 | 1,700 | | 580 | 1,300 | | 570 |
| Selenium | 3.9 | 36 | 180 | 1,500 | 6,800 | 3.9 | 4 | NA | | | 2.4 | | 2.4 | | U | 2.3 | NA | | | | U | 2.4 | 2.4 | | 2.3 | | U | 2.3 |
| Silver | 2 | 36 | 180 | 1,500 | 6,800 | 2 | 8.3 | NA | | | | U | 0.24 | | U | 0.23 | NA | | | | U | 0.24 | 0.39 | | 0.23 | | U | 0.23 |
| Sodium | - | - | - | - | - | - | - | NA | | | | U | 300 | | U | 290 | NA | | | 490 | | 290 | 710 | | 290 | | U | 290 |
| Thallium | - | - | - | - | - | - | - | NA | | | | U | 0.48 | | U | 0.47 | NA | | | | U | 0.47 | | U | 0.47 | | U | 0.46 |
| Vanadium | - | - | - | - | - | - | - | NA | | | 29 | | 12 | 27 | | 12 | NA | | | 29 | | 12 | 49 | | 12 | 41 | | 11 |
| Zinc | 109 | 3,300 | 10,000 | 10,000 | 10,000 | 109 | 2,480 | NA | | | ***110*** | | 12 | ***180*** | | 12 | NA | | | ***200*** | | 12 | ***1,500*** | | 12 | ***120*** | | 11 |
| **Pesticides** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| a-Chlordane | - | - | - | - | - | - | - | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | 0.0076 | | 0.0058 | NA | | |
| Aldrin | 0.01 | 0.02 | 0.10 | 0.68 | 1.40 | 0.14 | 0.19 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Alpha-BHC | 0.02 | 0.10 | 0.48 | 3.40 | 6.80 | 0.04 | 0.02 | NA | | | | U | 0.0012 | NA | | | NA | | | | U | 0.0012 | | U | 0.0012 | NA | | |
| beta-BHC | 0.04 | 0.07 | 0.36 | 3 | 14 | 0.6 | 0.09 | NA | | | | U | 0.0012 | NA | | | NA | | | | U | 0.0012 | | U | 0.0012 | NA | | |
| Chlordane (Total) | 0.09 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | 0.0076 | | 0.0058 | NA | | |
| delta-BHC | 0.04 | 100 | 100 | 500 | 1,000 | 0.04 | 0.25 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Dieldrin | 0.01 | 0.04 | 0.2 | 1.40 | 2.8 | 0.01 | 0.1 | NA | | | | U | 0.0012 | NA | | | NA | | | | U | 0.0012 | 0.0043 | d | 0.0012 | NA | | |
| Endosulfan I | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Endosulfan II | 2.4 | 4.8 | 24 | 200 | 920 | - | 102 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Endosulfan Sulfate | 2.4 | 4.8 | 24 | 200 | 920 | - | 1,000 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Endrin | 0.01 | 2.2 | 11 | 89 | 410 | 0.01 | 0.06 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Endrin Aldehyde | - | - | - | - | - | - | - | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Endrin Ketone | - | - | - | - | - | - | - | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| gamma-BHC | - | - | - | - | - | - | - | NA | | | | U | 0.0012 | NA | | | NA | | | | U | 0.0012 | | U | 0.0012 | NA | | |
| Heptachlor | 0.04 | 0.42 | 2.1 | 15 | 29 | 0.14 | 0.38 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Heptachlor Epoxide | - | - | - | - | - | - | - | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| Methoxychlor | - | - | - | - | - | - | - | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |
| p,p'-DDD | 0.0033 | 2.6 | 13 | 92 | 180 | 0.0033 | 14 | NA | | | | U | 0.003 | NA | | | NA | | | | U | 0.0029 | ***0.028*** | | 0.0029 | NA | | |
| p,p'-DDE | 0.0033 | 1.8 | 8.9 | 62 | 120 | 0.0033 | 17 | NA | | | | U | 0.003 | NA | | | NA | | | | U | 0.0029 | ***0.011*** | | 0.0029 | NA | | |
| p,p'-DDT | 0.0033 | 1.7 | 7.9 | 47 | 94 | 0.0033 | 136 | NA | | | | U | 0.003 | NA | | | NA | | | | U | 0.0029 | | U | 0.0029 | NA | | |
| Toxaphene | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | NA | | | | U | 0.029 | | U | 0.029 | NA | | |
| γ-Chlordane | 0.094 | 0.91 | 4.2 | 24 | 47 | 1.3 | 2.9 | NA | | | | U | 0.006 | NA | | | NA | | | | U | 0.0059 | | U | 0.0058 | NA | | |

# TABLE 1
## Soil Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Unrestricted Use Soil Cleanup Objective (mg/kg) | NYSDEC Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Restricted Residential Use Soil Cleanup Objective (mg/kg) | NYSDEC Commercial Use Soil Cleanup Objective (mg/kg) | NYSDEC Industrial Use Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Ecological Resources Soil Cleanup Objective (mg/kg) | NYSDEC Protection of Groundwater Soil Cleanup Objective (mg/kg) | SB-20 | | | SB-21 | | | SB-22 | | | SB-23 | | | SB-24C | | | SB-24 | | | SB-25 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lab ID | | | | | | | | AC98711-003 | | | AC98711-004 | | | AC98711-009 | | | AC98711-001 | | | AC98737-008 | | | AC98737-009 | | | AC98737-007 | | |
| Date | | | | | | | | 6/28/2017 | | | 6/28/2017 | | | 6/27/2017 | | | 6/28/2017 | | | 6/29/2017 | | | 6/29/2017 | | | 6/29/2017 | | |
| Matrix | | | | | | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | | Soil | | |
| Depth (feet bgs) | | | | | | | | 0.0-0.5 | | | 2.5-3.0 | | | 1.0-1.5 | | | 3.5-4.0 | | | Composite | | | 0.5-1.0 | | | 0.5-1.0 | | |
| Units | | | | | | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | | mg/Kg | | |
| | | | | | | | | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL | Result | Q | RL |
| **Polychlroinated Biphenyls (PCBs)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aroclor (Total) | 0.1 | 1 | 1 | 1 | 25 | 1 | 3.2 | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | 0.064 | | 0.029 | | U | 0.029 |
| Aroclor-1016 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1221 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1232 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1242 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1248 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1254 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | 0.064 | | 0.029 | | U | 0.029 |
| Aroclor-1260 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1262 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| Aroclor-1268 | - | - | - | - | - | - | - | NA | | | | U | 0.03 | NA | | | | U | 0.03 | | U | 0.029 | | U | 0.029 | | U | 0.029 |
| **Additional Analysis** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cyanide | - | - | - | - | - | - | - | NA | | | NA | | | NA | | | NA | | | | U | 0.28 | NA | | | NA | | |

**Notes:**

Q = Data Qualifier
U = Not Detected
NA = Not Analyzed
J = Estimated Value
RL = Reporting Limit
All concentrations are in milligrams per kilogram (mg/kg)
**140** = concentration exceeds Protection of Groundwater Soil Cleanup Objective
***140*** = concentration exceeds Unrestricted Use Soil Cleanup Objective
**10** = reporting limit exceeds most stringent Soil Cleanup Objective
* = The SCOs listed for Total Chromium are the trivalent chromium SCOs and hexavalent chromium SCOs, respectively, as total chromium does not have an established SCO.

# TABLE 2
## Groundwater Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Ambient Water Quality Standards & Guidance Values for Groundwater | TWP-2 | | | TWP-1 | | |
|---|---|---|---|---|---|---|---|
| Lab ID | | AC98757-001 | | | AC98757-002 | | |
| Date | | 6/28/2017 | | | 6/29/2017 | | |
| Matrix | | Groundwater | | | Groundwater | | |
| Well Depth (feet bgs) | | 18.50 | | | 19.75 | | |
| Units | | ug/L | | | ug/L | | |
| | | Result | Q | RL | Result | Q | RL |
| **Volatile Organic Compounds (VOCs)** | | | | | | | |
| 1,1,1-Trichloroethane | 5 | | U | **10** | | U | **20** |
| 1,1,2,2-Tetrachloroethane | 5 | | U | **10** | | U | **20** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 5 | | U | **10** | | U | **20** |
| 1,1,2-Trichloroethane | 1 | | U | **10** | | U | **20** |
| 1,1-Dichloroethane | 5 | | U | **10** | | U | **20** |
| 1,1-Dichloroethene | 5 | | U | **10** | | U | **20** |
| 1,2,3-Trichlorobenzene | 5 | | U | **10** | | U | **20** |
| 1,2,4-Trichlorobenzene | 5 | | U | **10** | | U | **20** |
| 1,2,4-Trimethylbenzene | 5 | **740** | | **10** | **2,500** | | **20** |
| 1,2-Dibromo-3-chloropropane | 0.04 | | U | **10** | | U | **20** |
| 1,2-Dibromoethane | - | | U | **10** | | U | **20** |
| 1,2-Dichlorobenzene | 4.7 | | U | **10** | | U | **20** |
| 1,2-Dichloroethane | 5 | | U | **5** | | U | **10** |
| 1,2-Dichloropropane | 1 | | U | **10** | | U | **20** |
| 1,3,5-Trimethylbenzene | 5 | **87** | | **10** | **890** | | 20 |
| 1,3-Dichlorobenzene | 5 | | U | **10** | | U | 20 |
| 1,4-Dichlorobenzene | 5 | | U | **10** | | U | 20 |
| 1,4-Dioxane | - | | U | 500 | | U | 1,000 |
| 2-Butanone | 50 | | U | 10 | | U | 20 |
| 2-Hexanone | 50 | | U | 10 | | U | 20 |
| 4-Isopropyltoluene | 5 | | U | **10** | | U | **20** |
| 4-Methyl-2-pentanone | 50 | | U | 10 | | U | 20 |
| Acetone | 50 | **63** | | **50** | **140** | | **100** |
| Benzene | 1 | **560** | | **5** | **94** | | **10** |
| Bromochloromethane | 5 | | U | **10** | | U | **20** |
| Bromodichloromethane | 50 | | U | 10 | | U | 20 |
| Bromoform | 50 | | U | 10 | | U | 20 |
| Bromomethane | 5 | | U | **10** | | U | **20** |
| Carbon disulfide | 60 | | U | 10 | | U | 20 |
| Carbon tetrachloride | 50 | | U | 10 | | U | 20 |
| Chlorobenzene | 5 | | U | **10** | | U | **20** |
| Chloroethane | 5 | | U | **10** | | U | **20** |
| Chloroform | 7 | | U | **10** | | U | **20** |
| Chloromethane | - | | U | 10 | | U | 20 |
| cis-1,2-Dichloroethene | 5 | | U | **10** | | U | **20** |
| cis-1,3-Dichloropropene | - | | U | 10 | | U | 20 |
| Cyclohexane | - | 240 | | 10 | 830 | | 20 |
| Dibromochloromethane | 50 | | U | 10 | | U | 20 |
| Dichlorodifluoromethane | 5 | | U | **10** | | U | **20** |
| Ethylbenzene | 5 | **660** | | **10** | **1,700** | | **20** |
| Isopropylbenzene | 5 | **100** | | **10** | **250** | | **20** |
| m&p-Xylenes | 5 | **960** | | **10** | **4,600** | | **20** |
| Methyl Acetate | - | | U | 10 | | U | 20 |
| Methylcyclohexane | - | 140 | | 10 | 550 | | 20 |
| Methylene chloride | 5 | | U | **10** | | U | **20** |
| Methyl-t-butyl ether | 10 | **140** | | 5 | | U | 10 |
| n-Butylbenzene | 5 | | U | **10** | **30** | | **20** |
| n-Propylbenzene | 5 | **200** | | **10** | **560** | | **20** |
| o-Xylene | 5 | **130** | | **10** | **410** | | **20** |
| sec-Butylbenzene | 5 | **11** | | **10** | **25** | | **20** |
| Styrene | 5 | | U | **10** | | U | **20** |
| t-Butylbenzene | 5 | | U | **10** | | U | **20** |
| Tetrachloroethene | 5 | | U | **10** | | U | **20** |
| Toluene | 5 | **67** | | **10** | **150** | | **20** |
| trans-1,2-Dichloroethene | 5 | | U | 10 | | U | 20 |
| trans-1,3-Dichloropropene | - | | U | 10 | | U | 20 |
| Trichloroethene | 5 | | U | **10** | | U | **20** |
| Trichlorofluoromethane | 5 | | U | **10** | | U | **20** |
| Vinyl chloride | 2 | | U | **10** | | U | **20** |
| Xylenes (Total) | 5 | **1,100** | | **10** | **5,000** | | **20** |

# TABLE 2
## Groundwater Sampling Analytical Results
Proposed CVS/Pharmacy Store No. 10386
13 Culver Street and 372 Riverdale Avenue
City of Yonkers, Westchester County, New York

| Sample ID | NYSDEC Ambient Water Quality Standards & Guidance Values for Groundwater | TWP-2 | | | TWP-1 | | |
|---|---|---|---|---|---|---|---|
| Lab ID | | AC98757-001 | | | AC98757-002 | | |
| Date | | 6/28/2017 | | | 6/29/2017 | | |
| Matrix | | Groundwater | | | Groundwater | | |
| Well Depth (feet bgs) | | 18.50 | | | 19.75 | | |
| Units | | ug/L | | | ug/L | | |
| | | Result | Q | RL | Result | Q | RL |
| **Semi-Volatile Organic Compounds (SVOCs)** | | | | | | | |
| 1,1'-Biphenyl | 5 | | U | 2 | | U | **6** |
| 1,2,4,5-Tetrachlorobenzene | 10 | | U | 2 | | U | 6 |
| 2,3,4,6-Tetrachlorophenol | - | | U | 2 | | U | 6 |
| 2,4,5-Trichlorophenol | 1 | | U | **2** | | U | **6** |
| 2,4,6-Trichlorophenol | 1 | | U | **2** | | U | **6** |
| 2,4-Dichlorophenol | 1 | | U | 0.8 | | U | 2.4 |
| 2,4-Dimethylphenol | 1 | **3.7** | | 0.5 | **10** | | 1.5 |
| 2,4-Dinitrophenol | 1 | | U | **10** | | U | **30** |
| 2,4-Dinitrotoluene | 5 | | U | 2 | | U | **6** |
| 2,6-Dinitrotoluene | 5 | | U | 2 | | U | **6** |
| 2-Chloronaphthalene | 5 | | U | 2 | | U | **6** |
| 2-Chlorophenol | 1 | | U | **2** | | U | **6** |
| 2-Methylnaphthalene | - | 86 | | 2 | 120 | | 6 |
| 2-Methylphenol | 1 | | U | 0.5 | | U | 1.5 |
| 2-Nitroaniline | 5 | | U | 2 | | U | **6** |
| 2-Nitrophenol | 1 | | U | **2** | | U | **6** |
| 3&4-Methylphenol | 1 | | U | 0.5 | | U | **1.5** |
| 3,3'-Dichlorobenzidine | 5 | | U | 2 | | U | **6** |
| 3-Nitroaniline | 5 | | U | 2 | | U | **6** |
| 4,6-Dinitro-2-methylphenol | 1 | | U | **10** | | U | **30** |
| 4-Bromophenyl-phenylether | - | | U | 2 | | U | 6 |
| 4-Chloro-3-methylphenol | 1 | | U | **2** | | U | **6** |
| 4-Chloroaniline | 5 | | U | 0.5 | | U | 1.5 |
| 4-Chlorophenyl-phenylether | - | | U | 2 | | U | 6 |
| 4-Nitroaniline | 5 | | U | 2 | | U | **6** |
| 4-Nitrophenol | 1 | | U | **2** | | U | **6** |
| Acenaphthene | 20 | | U | 2 | | U | 6 |
| Acenaphthylene | - | | U | 2 | | U | 6 |
| Acetophenone | - | | U | 2 | | U | 6 |
| Anthracene | 50 | | U | 2 | | U | 6 |
| Atrazine | 7.5 | | U | 2 | | U | 6 |
| Benzaldehyde | - | | U | 2 | | U | 6 |
| Benzo[a]anthracene | 0.002 | | U | **2** | | U | **6** |
| Benzo[a]pyrene | ND | | U | 2 | | U | 6 |
| Benzo[b]fluoranthene | 0.002 | | U | **2** | | U | **6** |
| Benzo[g,h,i]perylene | - | | U | 2 | | U | 6 |
| Benzo[k]fluoranthene | 0.002 | | U | **2** | | U | **6** |
| bis(2-Chloroethoxy)methane | 5 | | U | 2 | | U | **6** |
| bis(2-Chloroethyl)ether | 1 | | U | 0.5 | | U | **1.5** |
| bis(2-Chloroisopropyl)ether | 5 | | U | 2 | | U | **6** |
| bis(2-Ethylhexyl)phthalate | 5 | | U | 2 | | U | **6** |
| Butylbenzylphthalate | - | | U | 2 | | U | 6 |
| Caprolactam | - | | U | 2 | | U | 6 |
| Carbazole | - | | U | 2 | | U | 6 |
| Chrysene | 0.002 | | U | **2** | | U | **6** |
| Dibenzo[a,h]anthracene | - | | U | 2 | | U | 6 |
| Dibenzofuran | - | | U | 0.5 | | U | 1.5 |
| Diethylphthalate | 50 | | U | 2 | | U | 6 |
| Dimethylphthalate | - | | U | 2 | | U | 6 |
| Di-n-butylphthalate | 50 | | U | 0.5 | | U | 1.5 |
| Di-n-octylphthalate | - | | U | 2 | | U | 6 |
| Fluoranthene | 50 | | U | 2 | | U | 6 |
| Fluorene | 50 | | U | 2 | | U | 6 |
| Hexachlorobenzene | 0.04 | | U | **2** | | U | **6** |
| Hexachlorobutadiene | 0.5 | | U | **2** | | U | **6** |
| Hexachlorocyclopentadiene | 5 | | U | 2 | | U | **6** |
| Hexachloroethane | 5 | | U | 2 | | U | **6** |
| Indeno[1,2,3-cd]pyrene | 0.002 | | U | **2** | | U | **6** |
| Isophorone | 50 | | U | 2 | | U | 6 |
| Naphthalene | 10 | **87** | | 0.5 | **160** | | 1.5 |
| Nitrobenzene | 0.4 | | U | 2 | | U | 6 |
| N-Nitroso-di-n-propylamine | - | | U | 0.5 | | U | 1.5 |
| N-Nitrosodiphenylamine | 50 | | U | 2 | | U | 6 |
| Pentachlorophenol | 1 | | U | **10** | | U | **30** |
| Phenanthrene | 50 | | U | 2 | | U | 6 |
| Phenol | 1 | **4.6** | | **2** | | U | **6** |
| Pyrene | 50 | | U | 2 | | U | 6 |
| **Metals** | | | | | | | |
| Lead | 25 | **33** | | 3 | **27** | | 3 |

**Notes:**

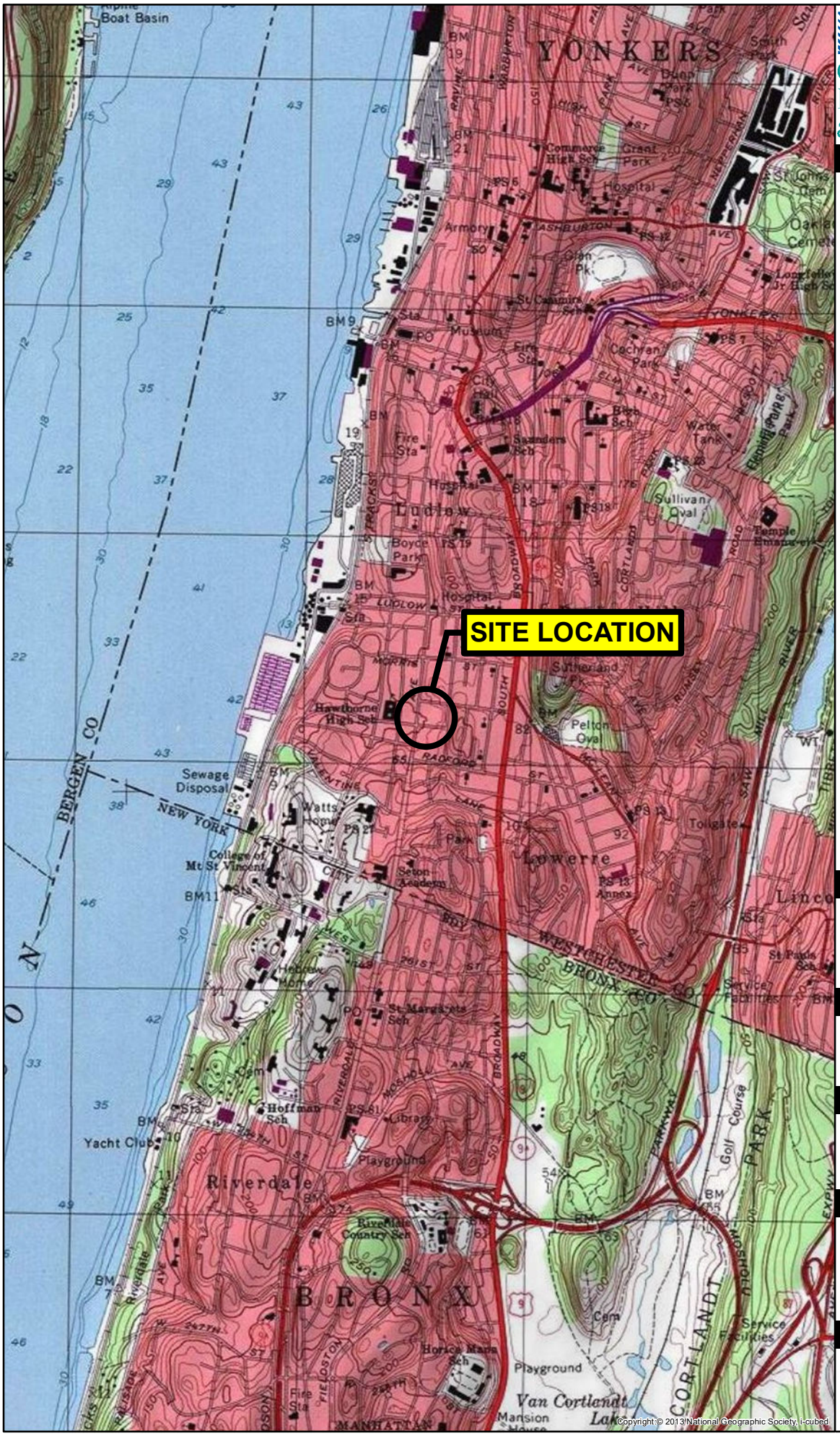
Q = Data Qualifier
U = Not Detected
NA = Not Analyzed
All concentrations are in micrograms per liter (µg/L)
**140** = concentration exceeds NYSDEC Ambient Water Quality Standards (AWQS)
**10** = reporting limit exceeds most stringent NYSDEC Ambient Water Quality Standards
J = Estimated Value
RL = Reporting Limit

**FIGURES**

Figure 1 - Site Location Map
Figure 2 - Site Plan
Figure 3A - REC Plan

Figure 4 - Soil Boring Location Plan
Figure 5A – Soil Sampling Exceedance Results Plan
Figure 5B – Soil Sampling Exceedance Results Plan
Figure 6 – Groundwater Sampling Exceedance Results Plan

Phase II Limited Subsurface Investigation
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

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## Regional Locator Map




Notes

1. Data Source: 2013 National Geographic Society, i-cubed
2. USGS Quad Name: Yonkers, New York
3. Latitude: 40°55'10.7"N
   Longitude: 73°54'02.9"W

## Scale and Orientation

0 1,000 2,000

1 inch = 2,000 feet

## Prepared For

CVS Pharmacy, Inc
One CVS Drive
Woonsocket, Rhode Island

## Prepared For

T.M. Crowley & Associates, Inc.
501 Pennsylvania Parkway, Suite 160
Indianapolis, Indiana 46280

## Site Address

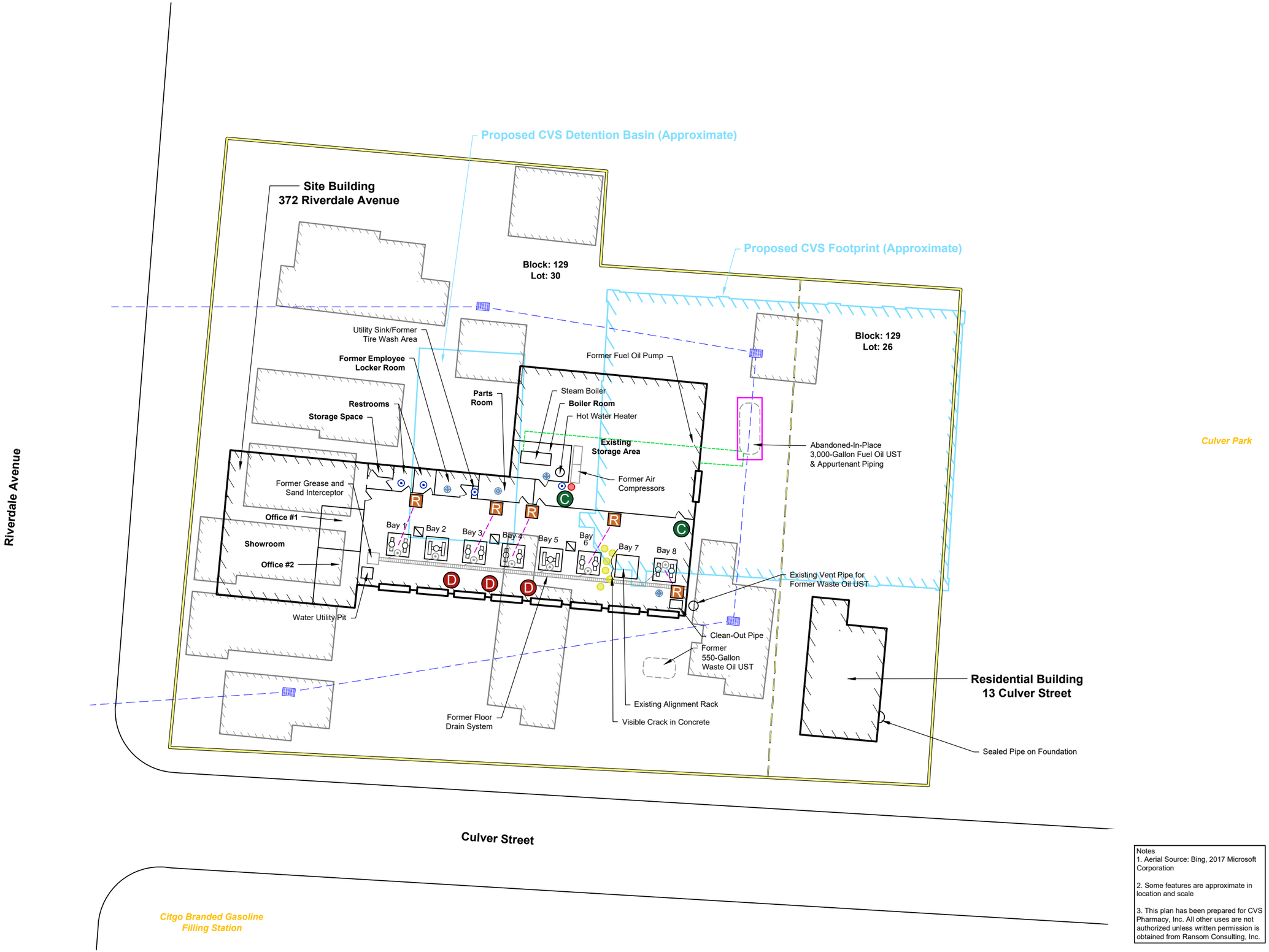
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

111.02013 | May 2017

# Figure 1

Site Location Map

PM File: CVS_YONKERS_NY-F1_SLM.mxd




Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation

2. Some features are approximate in location and scale

3. This plan has been prepared for CVS Pharmacy, Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

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## Legend & Notes

- Parcel Boundary
- Overhead Garage Door
- Stormwater Catch Basin
- Stormwater Line
- Hydraulic Oil Line
- Active Floor Drain
- Former Floor Drain
- Sealed Floor Drain
- Air Filter
- Hydraulic Lift Control Box
- Hydraulic Fluid Reservoir
- Compressor
- 55-Gallon Waste Oil Storage Drum
- Former 55-Gallon Waste Oil Drum Storage Area
- Hydraulic Lift (Single Post)
- Hydraulic Lift (Double Post)
- Geophysical Metallic Anomaly
- Former Residential Structure
- Proposed CVS Pharmacy Store
- Proposed CVS Pharmacy Site Features

## Scale and Orientation

0 15 30
1 inch = 30 feet

## Prepared For

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island
02895-6146

## Prepared For

T.M. Crowley & Associates, Inc.
501 Pennsylvania Parkway, Suite 160
Indianapolis, Indiana 46280

## Site Address

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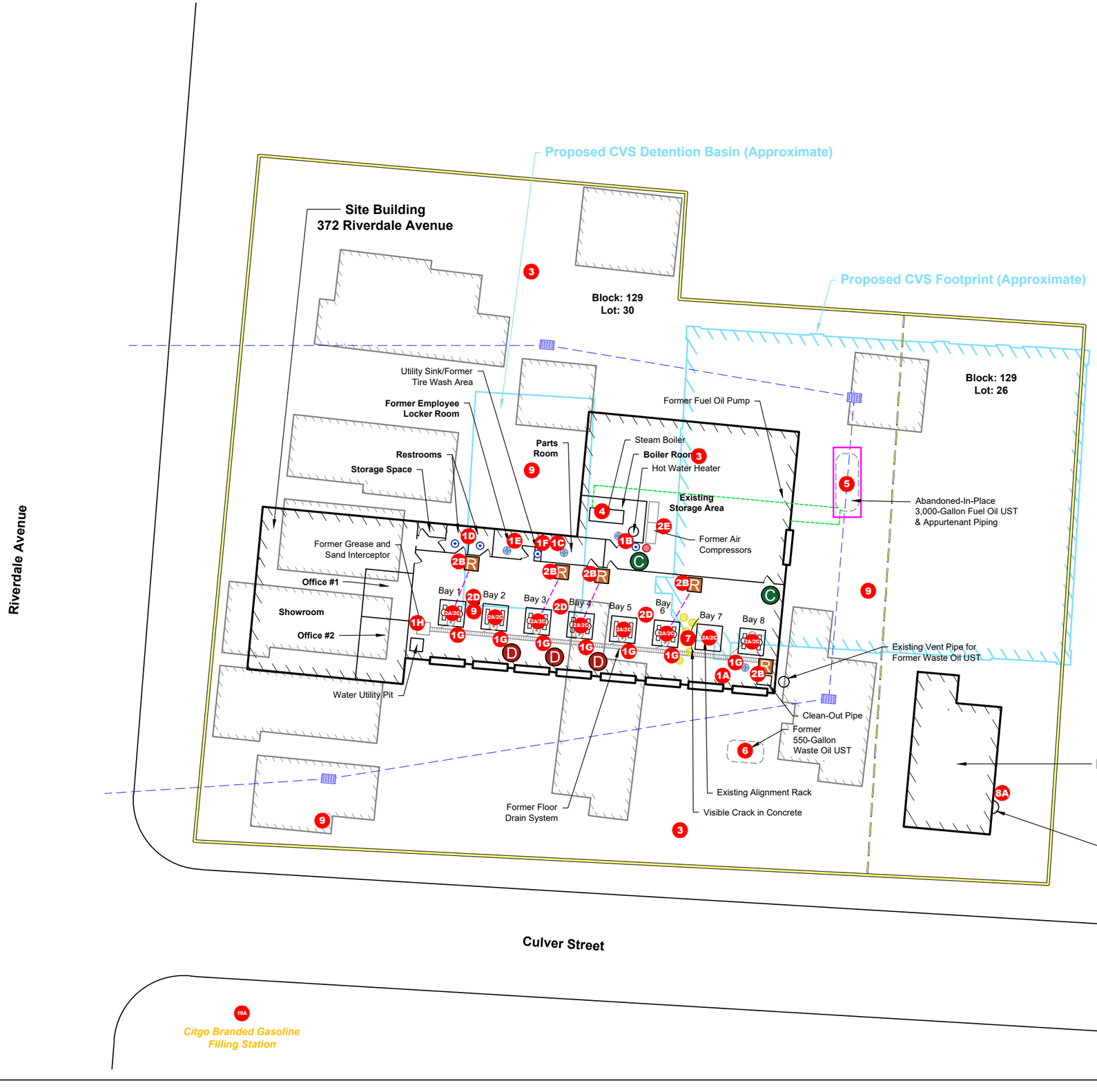
City of Yonkers, Westchester County, New York

111.02013 | July 2017

Figure 2

Site Plan

File: CVS_YONKERS_NY_REPORT.dwg Date: 07/20/2017




***REC 1 – Automotive Repair Drainage Systems***

- 1A Service Garage Sealed Floor Drain
- 1B Boiler Room Sealed Floor Drain
- 1C Parts Room Sealed Floor Drain
- 1D Bathroom Floor Drains
- 1E Employee Locker Room Sealed Floor Drain
- 1F Tire Wash Area Floor Drain
- 1G Former Hydraulic Lift Floor Drains
- 1H Former Grease and Sand Interceptor

***REC 2 – Automotive Repair Hydraulic Lift Systems***

- 2A Hydraulic Lifts and Alignment Rack
- 2B Wall-Mounted Hydraulic Fluid Reservoirs/Control Boxes
- 2C Former Hydraulic Lifts, Air/Hydraulic Alignment Rack and Underground Hydraulic Oil Reservoirs
- 2D Hydraulic Lift Control Boxes
- 2E Former Air Compressors
- 3 Vehicle Storage
- 4 Inactive Oil-Fired Boiler System
- 5 Former 3,000-gallon Fuel Oil UST
- 6 Former 550-gallon Waste Oil UST
- 7 55-Gallon Waste Oil Drum Storage

***REC 8 – Current/Former Residential Use***

- 8A Known Fuel Oil Use at Residential Building
- 8B Former Residential Use. (Not Depicted on Map)
- 9 Observed Historic Fill

***REC 10 – Potential Off-Site Sources***

- 10A Off-Site Citgo Service Station
- 10B Off-Site Devonshire Discount Tire, Auto Body & Repair Center (Not Depicted on Map)
- 10C Former Riverdale Auto Service Inc. (Not Depicted on Map)

Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation

2. Some features are approximate in location and scale

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## Legend & Notes

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- Overhead Garage Door
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- Hydraulic Lift (Double Post)
- Geophysical Metallic Anomaly
- Former Residential Structure
- Proposed CVS Pharmacy Store
- Proposed CVS Pharmacy Site Features

## Scale and Orientation

0 15 30

1 inch = 30 feet

## Prepared For

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02895-6146

## Prepared For

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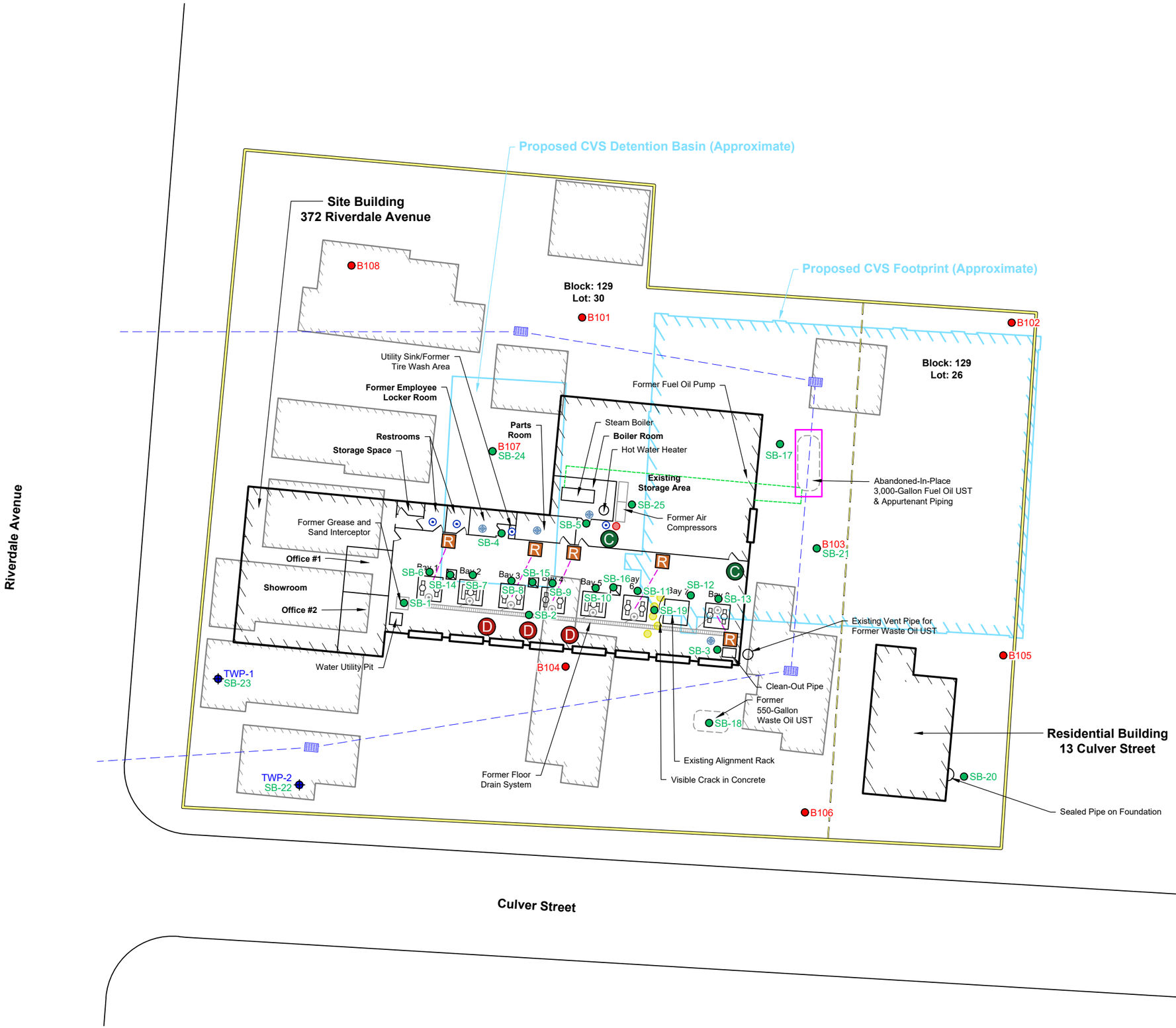
Figure 3

Recognized Environmental Concern Plan

File: CVS_YONKERS_NY_REPORT.dwg Date: 07/20/2017




Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation

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## Legend & Notes

- Parcel Boundary
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- 55-Gallon Waste Oil Storage Drum
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- Hydraulic Lift (Single Post)
- Hydraulic Lift (Double Post)
- Geophysical Metallic Anomaly
- Former Residential Structure
- Proposed CVS Pharmacy Store
- Proposed CVS Pharmacy Site Features
- Approximate Soil Boring
- Temporary Well Point Location
- Geotechnical Boring

## Scale and Orientation

0 15 30

1 inch = 30 feet

## Prepared For

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One CVS Drive
Woonsocket, Rhode Island
02895-6146

## Prepared For

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111.02013 | July 2017

Figure 4

Soil Boring Location Map

File: CVS_YONKERS_NY_REPORT.dwg Date: 07/20/2017

| Sample ID | SB-14A |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.51 |
| Benzo[a]pyrene | 0.48 |
| Benzo[b]fluoranthene | 0.69 |
| Chrysene | 0.54 |
| Indeno[1,2,3-cd]pyrene | 0.31 |

| Sample ID | SB-6A |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.63 |
| Benzo[a]pyrene | 0.68 |
| Benzo[b]fluoranthene | 1 |
| Chrysene | 0.77 |
| Indeno[1,2,3-cd]pyrene | 0.47 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | 0.059 |

| Sample ID | SB-6B |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-7 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.5-9.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-14B |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 1.5-2.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.61 |
| Benzo[a]pyrene | 0.61 |
| Benzo[b]fluoranthene | 0.86 |
| Chrysene | 0.71 |
| Indeno[1,2,3-cd]pyrene | 0.42 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | **0.16** |
| **Metals** | |
| Arsenic | 7.9 |
| Barium | 320 |
| Cadmium | **3.7** |
| Total Chromium* | **36** |
| Copper | **4,900** |
| Lead | **720** |
| Manganese | 300 |
| Total Mercury | **3** |
| Nickel | 20 |
| Zinc | **580** |

| Sample ID | SB-8A |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.52 |
| Benzo[a]pyrene | 0.5 |
| Benzo[b]fluoranthene | 0.7 |
| Chrysene | 0.53 |
| Indeno[1,2,3-cd]pyrene | 0.29 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-8B |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-9A |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 1.3 |
| Benzo[a]pyrene | **1.2** |
| Benzo[b]fluoranthene | **1.7** |
| Chrysene | 1.2 |
| Indeno[1,2,3-cd]pyrene | **0.74** |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-9B |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-13A |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.091 |
| Benzo[a]pyrene | 0.092 |
| Benzo[b]fluoranthene | 0.14 |
| Chrysene | 0.11 |
| Indeno[1,2,3-cd]pyrene | 0.06 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-13B |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

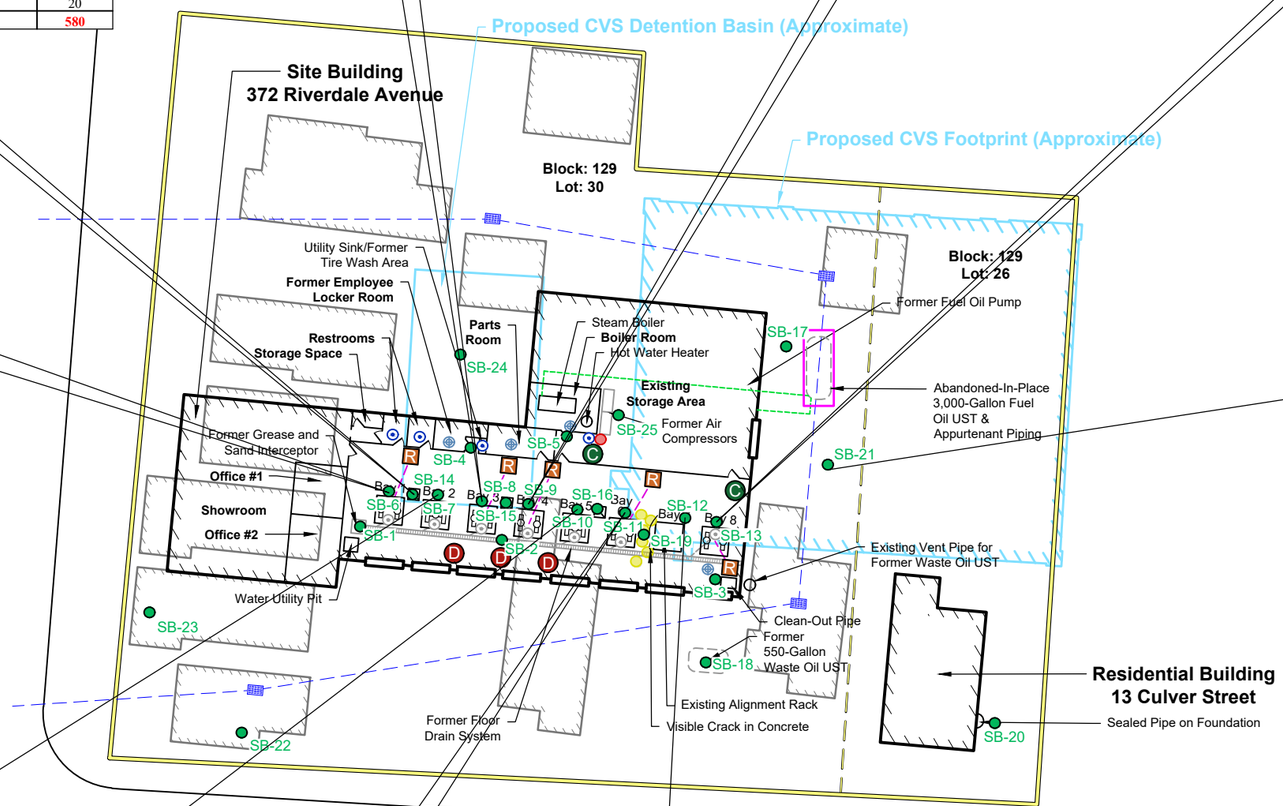
| Sample ID | SB-21 |
|---|---|
| Date Sampled | 6/28/2017 |
| Sample Interval (feet bgs) | 2.5-3.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.086 |
| Benzo[a]pyrene | 0.074 |
| Benzo[b]fluoranthene | 0.1 |
| Chrysene | 0.094 |
| Indeno[1,2,3-cd]pyrene | 0.045 |
| **Metals** | |
| Arsenic | **27** |
| Barium | 110 |
| Cadmium | ND |
| Total Chromium* | **30** |
| Copper | **87** |
| Lead | **100** |
| Manganese | 310 |
| Total Mercury | **28** |
| Nickel | 19 |
| Zinc | **110** |
| **Pesticides** | |
| p,p'-DDD | ND |
| p,p'-DDE | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-10 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.5-9.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-11A |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.042 |
| Benzo[a]pyrene | 0.043 |
| Benzo[b]fluoranthene | 0.056 |
| Chrysene | 0.044 |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-11B |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-12 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |




| Compound | NYSDEC Unrestricted Use SCO(mg/kg) | NYSDEC Protection of Groundwater SCO (mg/kg) |
|---|---|---|
| **Volatile Organic Compounds** | | |
| Acetone | **0.05** | 0.05 |
| **Polyaromatic Hydrocarbons** | | |
| Benzo(a)anthracene | **1** | 1 |
| Benzo[a]pyrene | **1** | 22 |
| Benzo[b]fluoranthene | **1** | 1.7 |
| Chrysene | **1** | 1 |
| Indeno[1,2,3-cd]pyrene | **0.5** | 8.2 |
| **Metals** | | |
| Arsenic | **13** | 16 |
| Barium | **350** | 820 |
| Cadmium | **2.5** | 7.5 |
| Chromium** | **30/1** | -/19 |
| Copper | **50** | 1,720 |
| Lead | **63** | 450 |
| Manganese | **1,600** | 2,000 |
| Total Mercury | **0.18** | 0.73 |
| Nickel | **30** | 130 |
| Zinc | **109** | 2,480 |
| **Pesticides** | | |
| p,p'-DDD | **0.0033** | 14 |
| p,p'-DDE | **0.0033** | 17 |
| **Polychlorinated Biphenyls** | | |
| Aroclor (Total) | **0.1** | 3.2 |

**Notes:**
- ND = Not Detected
- NA = Not Analyzed
- **10** = Concentration in exceedance of most stringent SCO
- SCO = Soil Cleanup Objective
- VOCs = Volatile Organic Compounds
- Note: All concentrations are in milligrams per kilogram (mg/kg). Compounds not analyzed are not depicted on this map.
- * The SCOs listed for Total Chromium are the trivalent chromium SCOs and hexavalent chromium SCOs, respectively, as total chromium does not have an established SCO.

Notes
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- Former Residential Structure
- Proposed CVS Pharmacy Store
- Proposed CVS Pharmacy Site Features
- Approximate Soil Boring

## Scale and Orientation

0 20 40

1 inch = 40 feet

## Prepared For

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## Prepared For

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**111.02013** | **July 2017**

Figure 5A

Soil Sampling Exceedance Results Plan

File: CVS_YONKERS_NY_REPORT.dwg Date: 07/20/2017

| Sample ID | SB-2 |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.44 |
| Benzo[a]pyrene | 0.45 |
| Benzo[b]fluoranthene | 0.59 |
| Chrysene | 0.43 |
| Indeno[1,2,3-cd]pyrene | 0.28 |
| **Metals** | |
| Arsenic | 6.6 |
| Barium | 160 |
| Cadmium | 1.2 |
| Total Chromium* | **23** |
| Copper | **61** |
| Lead | **520** |
| Manganese | 360 |
| Total Mercury | **1.9** |
| Nickel | 18 |
| Zinc | **300** |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-15 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.61 |
| Benzo[a]pyrene | 0.6 |
| Benzo[b]fluoranthene | 0.9 |
| Chrysene | 0.71 |
| Indeno[1,2,3-cd]pyrene | 0.39 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | 0.04 |

| Sample ID | SB-24 |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | **0.25** |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.55 |
| Benzo[a]pyrene | 0.78 |
| Benzo[b]fluoranthene | 0.64 |
| Chrysene | 0.82 |
| Indeno[1,2,3-cd]pyrene | 0.39 |
| **Metals** | |
| Arsenic | 13 |
| Barium | **750** |
| Cadmium | **4.2** |
| Total Chromium* | **45** |
| Copper | **140** |
| Lead | **4,300** |
| Manganese | 670 |
| Total Mercury | **0.89** |
| Nickel | **36** |
| Zinc | **1,500** |
| **Pesticides** | |
| p,p'-DDD | **0.028** |
| p,p'-DDE | **0.011** |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | 0.064 |

| Sample ID | SB-25 |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | 0.04 |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Metals** | |
| Arsenic | 6.2 |
| Barium | 140 |
| Cadmium | ND |
| Total Chromium* | **32** |
| Copper | 31 |
| Lead | **260** |
| Manganese | 930 |
| Total Mercury | **0.25** |
| Nickel | 28 |
| Zinc | **120** |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-19 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.59 |
| Benzo[a]pyrene | 0.51 |
| Benzo[b]fluoranthene | 0.69 |
| Chrysene | 0.53 |
| Indeno[1,2,3-cd]pyrene | 0.33 |
| **Metals** | |
| Arsenic | 3.8 |
| Barium | 60 |
| Cadmium | ND |
| Total Chromium* | **13** |
| Copper | 24 |
| Lead | **130** |
| Manganese | 310 |
| Total Mercury | **0.33** |
| Nickel | 12 |
| Zinc | 69 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

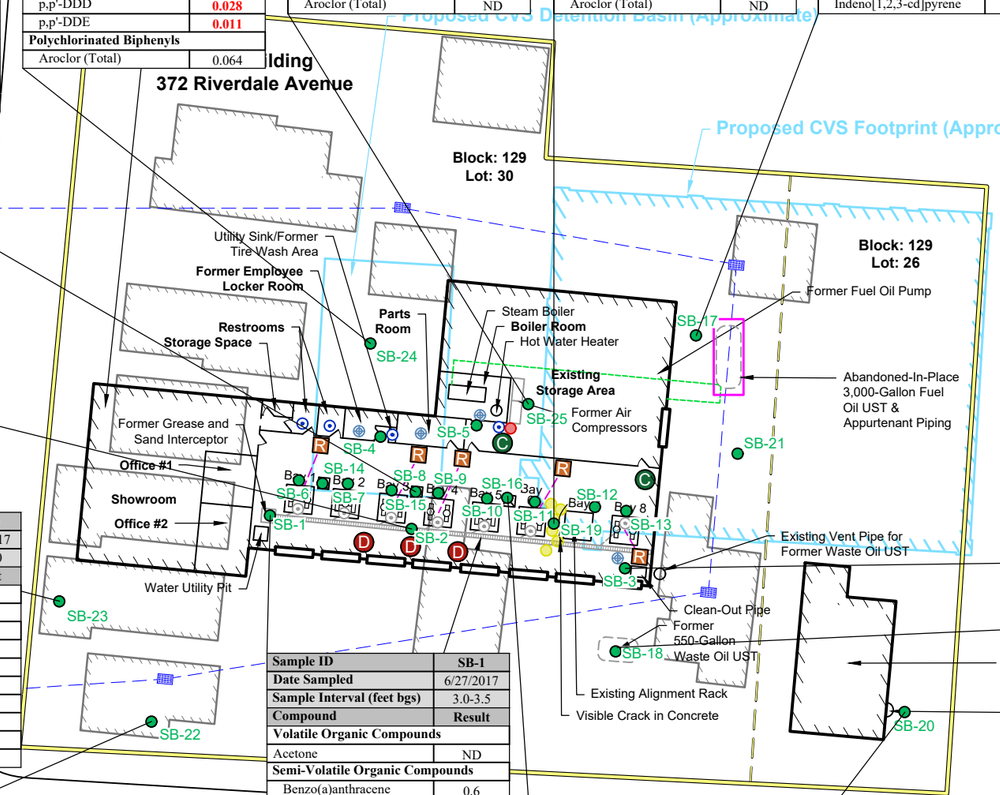
| Sample ID | SB-17 |
|---|---|
| Date Sampled | 6/29/2017 |
| Sample Interval (feet bgs) | 8.0-8.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |

| Sample ID | SB-3 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Metals** | |
| Arsenic | 1.7 |
| Barium | 76 |
| Cadmium | ND |
| Total Chromium* | **17** |
| Copper | 13 |
| Lead | 63 |
| Manganese | 290 |
| Total Mercury | 0.13 |
| Nickel | 13 |
| Zinc | 62 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Compound | NYSDEC Unrestricted Use SCO(mg/kg) | NYSDEC Protection of Groundwater SCO (mg/kg) |
|---|---|---|
| **Volatile Organic Compounds** | | |
| Acetone | **0.05** | 0.05 |
| **Polyaromatic Hydrocarbons** | | |
| Benzo(a)anthracene | **1** | 1 |
| Benzo[a]pyrene | **1** | 22 |
| Benzo[b]fluoranthene | **1** | 1.7 |
| Chrysene | **1** | 1 |
| Indeno[1,2,3-cd]pyrene | **0.5** | 8.2 |
| **Metals** | | |
| Arsenic | **13** | 16 |
| Barium | **350** | 820 |
| Cadmium | **2.5** | 7.5 |
| Chromium** | **30/1** | -/19 |
| Copper | **50** | 1,720 |
| Lead | **63** | 450 |
| Manganese | **1,600** | 2,000 |
| Total Mercury | **0.18** | 0.73 |
| Nickel | **30** | 130 |
| Zinc | **109** | 2,480 |
| **Pesticides** | | |
| p,p'-DDD | **0.0033** | 14 |
| p,p'-DDE | **0.0033** | 17 |
| **Polychlorinated Biphenyls** | | |
| Aroclor (Total) | **0.1** | 3.2 |

**Notes:**

ND = Not Detected
NA = Not Analyzed
**10** = Concentration in exceedance of most stringent SCO
SCO = Soil Cleanup Objective
VOCs = Volatile Organic Compounds
Note: All concentrations are in milligrams per kilogram (mg/kg) Compounds not analyzed are not depicted on this map.
* The SCOs listed for Total Chromium are the trivalent chromium SCOs and hexavalent chromium SCOs, respectively, as total chromium does not have an established SCO.




| Sample ID | SB-23 |
|---|---|
| Date Sampled | 6/28/2017 |
| Sample Interval (feet bgs) | 3.5-4.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.24 |
| Benzo[a]pyrene | 0.2 |
| Benzo[b]fluoranthene | 0.26 |
| Chrysene | 0.23 |
| Indeno[1,2,3-cd]pyrene | 0.095 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-22 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 1.0-1.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Metals** | |
| Arsenic | 2.6 |
| Barium | 170 |
| Cadmium | ND |
| Total Chromium* | 29 |
| Copper | **29** |
| Lead | **280** |
| Manganese | 290 |
| Total Mercury | **0.54** |
| Nickel | 20 |
| Zinc | **180** |

| Sample ID | SB-1 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 3.0-3.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.6 |
| Benzo[a]pyrene | 0.5 |
| Benzo[b]fluoranthene | 0.73 |
| Chrysene | 0.61 |
| Indeno[1,2,3-cd]pyrene | 0.3 |
| **Metals** | |
| Arsenic | 5.3 |
| Barium | **360** |
| Cadmium | 1.9 |
| Total Chromium* | **78** |
| Copper | **69** |
| Lead | **620** |
| Manganese | 330 |
| Total Mercury | **0.8** |
| Nickel | 25 |
| Zinc | **410** |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | 0.5 |

| Sample ID | SB-16 |
|---|---|
| Date Sampled | 6/27/2017 |
| Sample Interval (feet bgs) | 0.5-1.0 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | 0.038 |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | 0.048 |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

| Sample ID | SB-20 |
|---|---|
| Date Sampled | 6/28/2017 |
| Sample Interval (feet bgs) | 0.0-0.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | **1.7** |
| Benzo[a]pyrene | **1.5** |
| Benzo[b]fluoranthene | **1.9** |
| Chrysene | **1.6** |
| Indeno[1,2,3-cd]pyrene | **0.98** |

| Sample ID | SB-18 |
|---|---|
| Date Sampled | 6/28/2017 |
| Sample Interval (feet bgs) | 7.0-7.5 |
| Compound | Result |
| **Volatile Organic Compounds** | |
| Acetone | ND |
| **Semi-Volatile Organic Compounds** | |
| Benzo(a)anthracene | ND |
| Benzo[a]pyrene | ND |
| Benzo[b]fluoranthene | ND |
| Chrysene | ND |
| Indeno[1,2,3-cd]pyrene | ND |
| **Metals** | |
| Arsenic | 1.6 |
| Barium | 120 |
| Cadmium | ND |
| Total Chromium* | **31** |
| Copper | 38 |
| Lead | 20 |
| Manganese | **1,800** |
| Total Mercury | ND |
| Nickel | 29 |
| Zinc | 75 |
| **Polychlorinated Biphenyls** | |
| Aroclor (Total) | ND |

Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation

2. Some features are approximate in location and scale

3. This plan has been prepared for CVS Pharmacy, Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

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## Legend & Notes

- Parcel Boundary
- Overhead Garage Door
- Stormwater Catch Basin
- Stormwater Line
- Hydraulic Oil Line
- Active Floor Drain
- Former Floor Drain
- Sealed Floor Drain
- Air Filter
- Hydraulic Lift Control Box
- Hydraulic Fluid Reservoir
- Compressor
- 55-Gallon Waste Oil Storage Drum
- Former 55-Gallon Waste Oil Drum Storage Area
- Hydraulic Lift (Single Post)
- Hydraulic Lift (Double Post)
- Geophysical Metallic Anomaly
- Former Residential Structure
- Proposed CVS Pharmacy Store
- Proposed CVS Pharmacy Site Features
- Approximate Soil Boring

## Scale and Orientation

0 20 40
1 inch = 40 feet

## Prepared For

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island
02895-6146

## Prepared For

T.M. Crowley & Associates, Inc.
501 Pennsylvania Parkway, Suite 160
Indianapolis, Indiana 46280

## Site Address

Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

**111.02013** | **July 2017**

Figure 5B

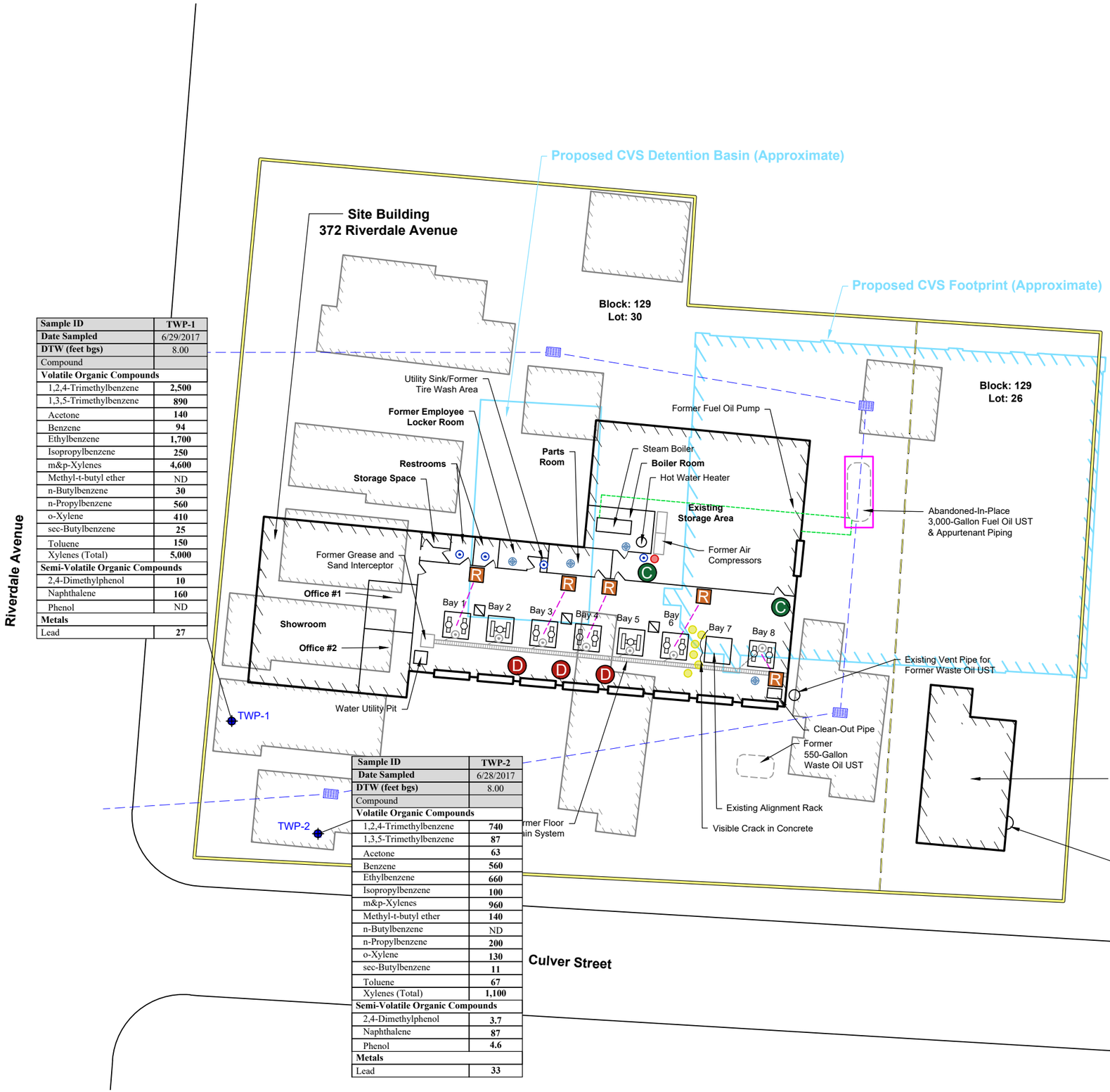
Soil Sampling Exceedance Results Plan

File: CVS_YONKERS_NY_REPORT.dwg Date: 07/20/2017

**Notes:**

Q = Data Qualifier
ND = Not Detected
NA = Not Analyzed
All concentrations are in micrograms/liter (µg/L)
**10** = Reporting Limit Exceeds Most Stringent AWQS
J = Estimated Value
RL = Reporting Limit
VOCs = Volatile Organic Compounds
AWQS = New York State Ambient Water Quality Standards
DTW = Depth to Water

| Compound | NYSDEC AWQS |
|---|---|
| **Volatile Organic Compounds** | |
| 1,2,4-Trimethylbenzene | 5 |
| 1,3,5-Trimethylbenzene | 5 |
| Acetone | 50 |
| Benzene | 1 |
| Ethylbenzene | 5 |
| Isopropylbenzene | 5 |
| m&p-Xylenes | 5 |
| Methyl-t-butyl ether | 10 |
| n-Butylbenzene | 5 |
| n-Propylbenzene | 5 |
| o-Xylene | 5 |
| sec-Butylbenzene | 5 |
| Toluene | 5 |
| Xylenes (Total) | |
| **Semi-Volatile Organic Compounds** | |
| 2,4-Dimethylphenol | 1 |
| Naphthalene | 10 |
| Phenol | 1 |
| **Metals** | |
| Lead | 25 |




| Sample ID | TWP-1 |
|---|---|
| **Date Sampled** | 6/29/2017 |
| **DTW (feet bgs)** | 8.00 |
| Compound | |
| **Volatile Organic Compounds** | |
| 1,2,4-Trimethylbenzene | **2,500** |
| 1,3,5-Trimethylbenzene | **890** |
| Acetone | **140** |
| Benzene | **94** |
| Ethylbenzene | **1,700** |
| Isopropylbenzene | **250** |
| m&p-Xylenes | **4,600** |
| Methyl-t-butyl ether | ND |
| n-Butylbenzene | **30** |
| n-Propylbenzene | **560** |
| o-Xylene | **410** |
| sec-Butylbenzene | **25** |
| Toluene | **150** |
| Xylenes (Total) | **5,000** |
| **Semi-Volatile Organic Compounds** | |
| 2,4-Dimethylphenol | **10** |
| Naphthalene | **160** |
| Phenol | ND |
| **Metals** | |
| Lead | **27** |

| Sample ID | TWP-2 |
|---|---|
| **Date Sampled** | 6/28/2017 |
| **DTW (feet bgs)** | 8.00 |
| Compound | |
| **Volatile Organic Compounds** | |
| 1,2,4-Trimethylbenzene | **740** |
| 1,3,5-Trimethylbenzene | **87** |
| Acetone | **63** |
| Benzene | **560** |
| Ethylbenzene | **660** |
| Isopropylbenzene | **100** |
| m&p-Xylenes | **960** |
| Methyl-t-butyl ether | **140** |
| n-Butylbenzene | ND |
| n-Propylbenzene | **200** |
| o-Xylene | **130** |
| sec-Butylbenzene | **11** |
| Toluene | **67** |
| Xylenes (Total) | **1,100** |
| **Semi-Volatile Organic Compounds** | |
| 2,4-Dimethylphenol | **3.7** |
| Naphthalene | **87** |
| Phenol | **4.6** |
| **Metals** | |
| Lead | **33** |

Notes
1. Aerial Source: Bing, 2017 Microsoft Corporation

2. Some features are approximate in location and scale

3. This plan has been prepared for CVS Pharmacy, Inc. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

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Consulting Engineers and Scientists

## Legend & Notes

- Parcel Boundary
- Overhead Garage Door
- Stormwater Catch Basin
- Stormwater Line
- Hydraulic Oil Line
- Active Floor Drain
- Former Floor Drain
- Sealed Floor Drain
- Air Filter
- Hydraulic Lift Control Box
- Hydraulic Fluid Reservoir
- Compressor
- 55-Gallon Waste Oil Storage Drum
- Former 55-Gallon Waste Oil Drum Storage Area
- Hydraulic Lift (Single Post)
- Hydraulic Lift (Double Post)
- Geophysical Metallic Anomaly
- Former Residential Structure
- Proposed CVS Pharmacy Store
- Proposed CVS Pharmacy Site Features
- Temporary Well Point Location

## Scale and Orientation

0 15 30
1 inch = 30 feet

## Prepared For

CVS Pharmacy, Inc.
One CVS Drive
Woonsocket, Rhode Island
02895-6146

## Prepared For

T.M. Crowley & Associates, Inc.
501 Pennsylvania Parkway, Suite 160
Indianapolis, Indiana 46280

## Site Address

Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

**111.02013** | **July 2017**

Figure 6

Groundwater Sampling Exceedance Results Plan

File: CVS_YONKERS_NY_REPORT.dwg Date: 07/20/2017

**APPENDIX A**

Geophysical Survey Report

Phase II Limited Subsurface Investigation
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

ADVANCED GEOLOGICAL SERVICES

Headquarters in Malvern, PA
Offices in Chillicothe, OH and
Moraga, CA

July 18, 2017
Reference: 17-175-1

Ms. Kimberly Skibo
Ransom Consulting, Inc.
2127 Hamilton Avenue
Hamilton, NJ 08619

**Subject:** Geophysical Investigation Results
372 Riverdale Avenue & 13 Culver Street
Yonkers, New York

Dear Ms. Skibo:

Advanced Geological Services (AGS) presents this letter to Ransom Consulting, Inc. (Ransom) summarizing the geophysical investigation completed by AGS on June 27 through 29, 2017 at the properties located at 372 Riverdale Avenue and 13 Culver Street in Yonkers, New York.

At the time of the investigation the property at 372 Riverdale Avenue was being actively used by an automobile repair business. Parked cars were tightly parked throughout large portions of the property. Also, the 13 Culver Street property was being used for parking and staging of several Taco Trucks, thereby limiting access of the entire site.

The objectives of the geophysical investigation were to utilize geophysical methods to:

1) Identify potential underground storage tanks (USTs), buried structures, areas of fill, and other potential features of environmental concern at the subject property.

2) Clear numerous proposed drilling location of identifiable utilities or potential drilling hazards.

3) Attempt to video image a floor drain system on the southern side of the 372 Riverdale building where the automobile repair lifts exist.

To achieve the project objectives, AGS utilized a combination of the terrain conductivity electromagnetic (EM) method, the ground penetrating radar (GPR) method, the radio frequency utility locating method, the hand-held (EM) metal detection method, and a pipe video imaging system.

## ***Methods***

### *Terrain Conductivity Electromagnetic (EM) Method*

Terrain conductivity EM data were collected across accessible portions of the geophysical investigation area to identify anomalous features that could indicate the presence of USTs, buried structures such as foundations or building slabs, or other anomalous subsurface features. The EM method uses the principle of electromagnetic induction to measure the variability of terrain conductivity of subsurface materials. The terrain conductivity EM method is capable of detecting variations in soil conductivity that can be caused by changes in soil

composition, soil compaction, or moisture content that are often associated with previously excavated or disturbed soils. The EM method also reacts very strongly to the presence of buried metal objects such as USTs, pipelines, or buried drums, as well a metallic features on the ground surface, such as parked cars, or building structures.

A Geonics EM31 terrain conductivity EM instrument was used to collect EM data in accessible portions of the 372 Riverdale Avenue property. The EM31 operates in accordance with the theory of operation at low induction numbers. An alternating current is passed through the transmitter coil to induce eddy currents into the ground. These eddy currents generate a secondary magnetic field. A component of the induced magnetic field is detected by a receiver coil and measured by the instrument. The receiver measures the field strength of both the quadrature and the in-phase components. The quadrature response is displayed as terrain conductivity in units of milliSeimens per meter (mS/m). The in-phase response is displayed in units of parts per thousand (ppt) of the transmitted signal. The estimated maximum depth of investigation of the EM31 instrument is up to approximately 18 feet below the ground surface.

Terrain conductivity EM data were collected along parallel traverses spaced 5 feet apart. Two EM measurements were recorded every second to provide a reading approximately every 1.5 feet along each traverse. The geographical coordinates of each reading was determined using a Trimble XH-3000 global positioning system (GPS) capable of sub-meter accuracy and was recorded along with the EM reading. Real-time navigation was also achieved using the GPS instrument.

Data were reviewed during data collection to identify potential targets of interest that would require additional investigation and characterization using GPR methods. Locations of anomalous features identified in the field were marked on site with spray paint. The EM data were downloaded upon return to the AGS office, contoured, and provided final review to identify any subtle features that may not have been recognized in the field.

*Ground Penetrating Radar (GPR) Method*

The ground penetrating radar (GPR) method was used to further characterize anomalies identified in the EM results, to search for USTs and other targets of interest, as well as to clear the area surrounding proposed drilling locations of buried utilities.

The GPR method is based upon the transmission of repetitive, radio-frequency electromagnetic (EM) pulses into the subsurface. When the transmitted energy of the down-going wave contacts an interface of dissimilar electrical character, part of the energy is returned to the surface in the form of a reflected signal. This reflected signal is detected by a receiving transducer and is displayed on the screen of the GPR unit as well as being recorded on the internal hard-drive. The received GPR response remains constant as long as the electrical contrast between media is present and constant. Lateral or vertical changes in the electrical properties of the subsurface result in equivalent changes in the GPR response. The system records a continuous image of the subsurface by plotting two-way travel time of the reflected EM pulse versus distance traveled along the ground surface. Two-way travel time values are

then converted to depth using known soil velocity functions.

A GSSI SIR-3000 GPR system and a 400 megahertz (MHz) antenna were used with a recording window of 60 nanoseconds (ns) to provide depth of penetration of up to approximately 10 feet under ideal field conditions. High conductivity soil, some conductive ballast gravels, and de-icing salt can strongly attenuate GPR signals, thereby decreasing the effective depth of investigation of the GPR system.

GPR data were collected select portions of the site to further characterize EM anomalies and to search for features of potential environmental concern. GPR traverses were also collected in an approximate grid pattern surrounding each proposed drilling location to identify potential utilities. Locations of identified features were marked on the ground surface with spray paint.

*Hand-Held Electromagnetic (EM) Metal Detection Method*

The hand-held EM metal detection method was used to search for metallic utilities, and other buried metal objects in the areas surrounding proposed drilling locations that could pose a drilling hazard. This instrument was also used to scan areas that could not be accessed with the larger EM31 instrument. Areas scanned included the 13 Culver Street property and several accessible portions of the 372 Riverdale Avenue property.

This EM method uses the principle of electromagnetic induction to detect shallow buried metal objects. This is done by carrying a unit consisting of hand-held radio frequency transmitter and receiver above the ground and continuously scanning the surface. A primary coil broadcasts a radio frequency signal from a transmitter. This primary radio signal induces secondary electrical currents in metal objects. These secondary currents in turn produce a magnetic field which is detected by the receiver.

The EM instrument used for this investigation was a Fisher TW-6 pipe and cable locator. This instrument is expressly designed to detect metallic pipes, cables, USTs, manhole covers, and other buried metallic objects. The instrument produces an audible response and significant meter deflections when near a metal object. The peak instrument response occurs when the unit is directly over the object. The EM instrument is ineffective in areas covered with reinforced concrete because the metal reinforcing material saturates the instrument response.

The TW-6 is operated in scanning mode, and does not allow for recording of the instrument response. For the present investigation, the accessible survey areas were scanned in a grid pattern to identify potential utilities, USTs, or other buried metal objects. Locations of potential utilities were marked on site with spray paint and/or pin flags.

*Radio Frequency (RF) Utility Locating Methods*

The areas surrounding proposed drilling locations were inspected using a RF utility locating system (also known as a precision utility locator (PUL)) to identify and trace potential electrical, telecommunication, water, and other potential identifiable utilities.

AGS utilized a Radiodetection RD4000 RF utility locating instrument. This instrument consists

of a receiver/tracer and a remote transmitter which operates at multiple radio-frequencies (RF) ranging from 8 kHz to 65 kHz. The receiver unit detects the transmitted RF signals as well as standard 60 Hz electrical power lines and broad-band RF signals when operated in passive detection modes. This utility tracing instrument is an analog device which provides visual and audible feedback to the operator when a utility coupled with the transmitted signal is crossed. The transmitter produces a radio-frequency signal in the utility to be traced by either induction coupling or direct hook-up. The receiver output varies an audible pitch and visual feedback depending upon how far the utility is from the receiver. By carefully adjusting the gain of the receiver it is possible to determine the location of the utility and to separate it from adjacent utilities.

The investigation areas were scanned using passive 60 Hz and the broad-band RF detection modes to identify potential utilities that may be present. Inductive and direct hook-up methods were used to trace specific utilities when possible. Identified utilities were marked on the ground surface with spray paint and/or pin flags.

*Pipe Video Imaging*

A pipe video inspection system was used to attempt to image the floor drain system located on the south side of the 372 Riverdale building interior. A Pearpoint Flexiprobe P340 system was used to image the floor drain system. A high-resolution camera is mounted on a fiberglass 300-foot long push-rod that is capable of negotiating most clean-outs and traps encountered. This system has the capability of recording the video on a SD card for easy transfer to a computer and review of the pipe images.

## ***Results and Discussion***

*Site-wide Investigation to Identify USTs and Potential Areas of Concern*

The property located at 372 Riverdale Avenue was being actively used by a busy automobile repair business at the time of the geophysical investigation. Cars were parked very tightly throughout large portions of the property making it impossible to access those areas. Terrain conductivity EM data were collected across an accessible portions on the western side of the property located to the north and south of the building. Figure 1 shows the color contoured EM results from those areas as well as areas where cars were parked and portions of the site covered that were with reinforced concrete.

The terrain conductivity results on the north side of the 372 Riverdale building indicate that no anomalous features are present within that area. The EM results on the south side of the building showed a strong EM response in the area where the sanitary sewer and water services extend between Culver Street and the south side of the 372 Riverdale building (Figure 1).

The areas where terrain conductivity EM data were collected were also investigated using GPR methods. The GPR results suggested that fill or building rubble may be present throughout most of these areas.

The remaining accessible portions of the 372 Riverdale property were scanned using a combination of the GPR method and hand-held EM metal detection method. Features identified during this portion of the investigation included:

- A backfilled excavation from a former 500-gallon UST located near the southeast corner of the building. A vent pipe visible at the southeast corner of the building extends to the edge of the excavation (Figure1).
- A potential former heating oil UST that may have been abandoned in place located on the east side of the building, near the northeast building corner (Figure 1). This feature produced an EM response with the hand-held EM metal detection instrument and also an ambiguous GPR response. A vent pipe located on the building wall and a potential supply/return line were also identified leading from the building to the possible abandoned UST location. The geophysical results at this locations were not conclusive. Therefore, it is recommended that additional direct investigation of this location, such as excavation, be considered to better determine if a UST is present at this location.

In additional to the UST related features described above, utilities that were identified during the investigation were marked on site and are shown on Figure 1.

Several Taco Trucks and other vehicles were present at the 13 Culver Street property at the time of the geophysical investigation that kept it from being possible to complete an EM investigation using the terrain conductivity EM instrument. Instead the accessible portions of the property were scanned using the hand-held EM metal detection method and the GPR methods. A previous site investigation inspection noted a sealed pipe protruding from the east side of the residence at 13 Culver (Figure 1). Geophysical investigation surrounding that area did not indicate the presence of any USTs. However, tracing the natural gas service for the property did extend from Culver Street to the approximate location where the sealed pipe was situated, suggesting that it may have been related to the previous gas service for the property. No USTs or other anomalies of concern were noted within the accessible portions of the property at 13 Culver Street.

*Utility Clearance of Drilling Locations*

A number of environmental boring and geotechnical borings were cleared of identifiable utilites. Utilities surrounding the borings located inside the 372 Riverdale Avenue building and those situated on reinforced concrete were identified using a combination of RF utility locating methods and GPR methods. All other boring locations were also scanned using RF and GPR methods, and additionally the hand-held EM metal detection method. Identified utilities inside the building were marked on site using chalk, and those identified outside of the building were marked using spray paint. If a utility was too close to the proposed drilling location, the proposed drilling location was adjust to an area clear of identified utilities with the approval of the Ransom representative.

*Pipe Inspection of the Floor Drain System*

A attempt was made to access the floor drain system located inside of the south side of the auto shop at the 372 Riverdale property. The camera was inserted into the clean-out located inside of the southeast corner of the building. However, there was a wire trap approximately 5 feet beyond the clean-out opening that prevented access (see photo). Attempts were made to access the drain system through three other clean-outs located along the length of the floor drain inside the south side of the building, but they were all filled with sediments preventing access. Because of the site conditions, it was not possible to inspect the floor drain system that extends from east to west inside the south side of the auto shop area.



*Illustration 1: Photo showing wire trap inside floor drain clean-out.*

***Summary and Closing***

In summary, the geophysical investigation of the 372 Riverdale Avenue and 13 Culver Street properties was limited to the accessible areas. A large number of cars parked closely together was present at the 372 Riverdale propsert at the time of the investigation, and several trucks and cars were also present at the 13 Culver Street property limiting access in portions of the properties.

At the 372 Riverdale property one backfilled UST excavation was identified near the southeast corner of the site building, and a potential abandoned in place UST was identified on the east side of the building near the northeast corner of the building. Excavation or another appropriate methods will be required to better determine if there is actually an abandoned UST present at that location.

A natural gas service line leading from Culver Street to the east side of the residence at 13 Culver Street was identified that appears to end in the approximate location where a sealed pipe was noted protruding through the foundation wall during a previous site inspection. No USTs were identified in the area where that sealed pipe was noted.

Aside from those feature noted and described above, and shown on Figure 1, no other underground features were identified during this investigation.

All geophysical data and field notes collected as a part of this investigation will be archived at the AGS office. The data collection and interpretation methods used in this investigation are consistent with standard practices applied to similar geophysical investigations. The correlation of geophysical responses with probable subsurface features is based on the past results of similar surveys although it is possible that some variation could exist at this site. Due to the nature of geophysical data, no guarantees can be made or implied regarding the presence or absence of additional objects or targets beyond those identified.

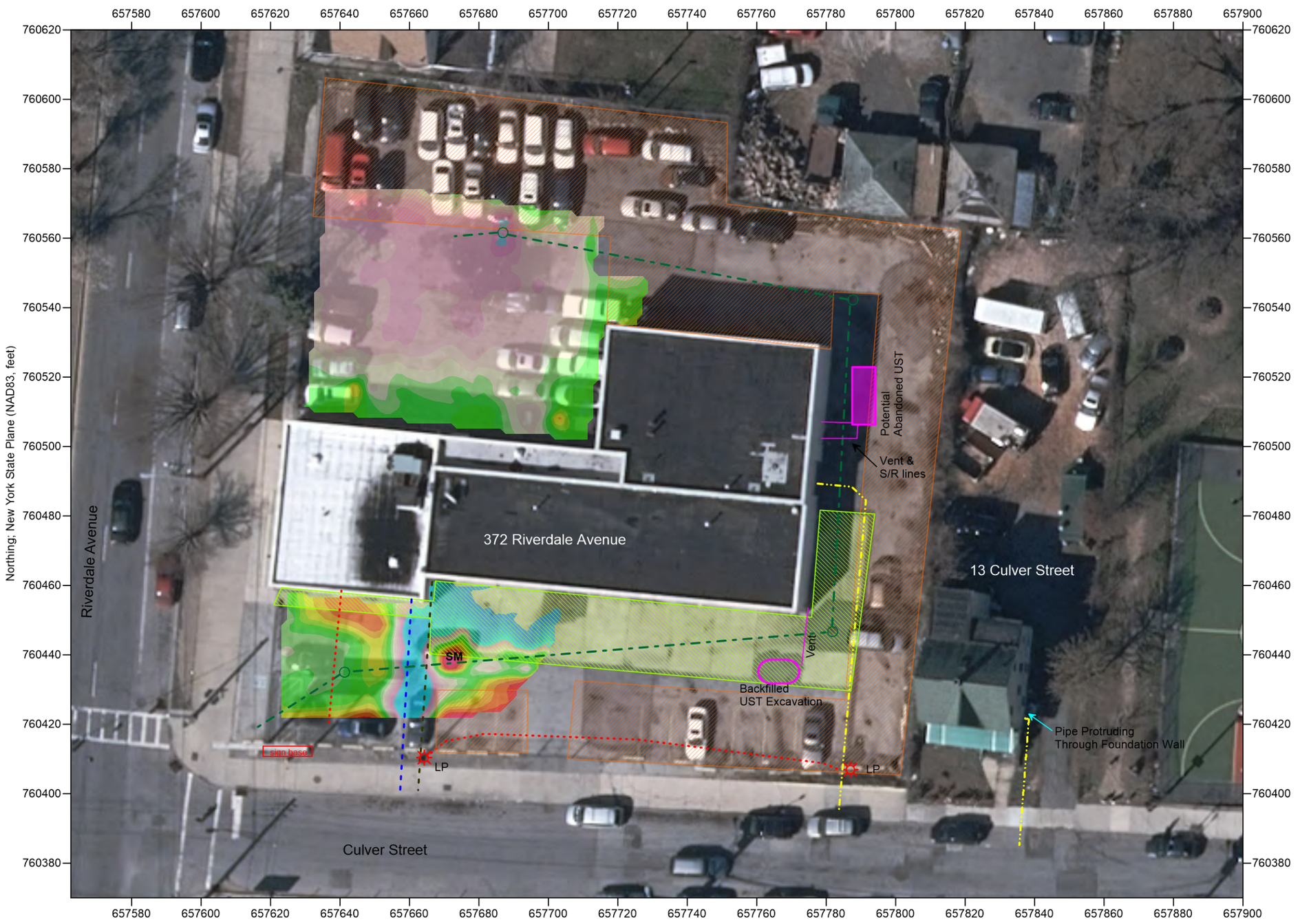
If you have any questions regarding the results of this field investigation, please contact me at 610-722-5500. It was a pleasure working with you on this project and we look forward to being able to provide you with sub-surface imaging services in the future.

Sincerely,



Donald Jagel, P.G.
*Principal Geophysicist/Branch Manager*
Advanced Geological Services, Inc.
P.O. Box 349, 280½ East Main Street
Chillicothe, OH 45601

attachment: Figure 1




Legend

- Parked Cars
- Reinforced Concrete
- Water
- Sanitary Sewer
- Electric
- Natural Gas
- Storm Sewer
- LP Light Post
- Catch Basin
- SM Surface Metal

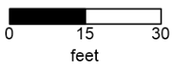
NOTES:

1) Terrain conductivity EM data were collected using a Geonics EM31 instrument. A GSSI SIR3000 GPR instrument was used to collect data close to buildings and parked vehicles. Utilities at the site were identified using a of a radio frequency utility locating, system (RD-4000) and a hand-held EM metal detection instrument (TW-6 m-scope). Accessible areas that could not be investigated using the terrain conductivity EM methods were also scanned using the TW-6 m-scope and GPR methods. All identified features were marked on site with spray paint.
2) Identified site features are based on the geophysical responses from several geophysical instruments. See report text for additional detail.
3) Base aerial orthophotograph downloaded from https://orthos.dhses.ny.gov/, and included file e_06570760_06_07400_4bd_2016.zip. All base orthophotographs have an acquisition date of 2016. This work was not completed by a licensed surveyor, as such should be considered approximate, and is for illustrative purposes only.
4) The items shown on this figure may not be all inclusive. AGS does not warrant the fact that additional buried features/utilities may be present which could not be identified by AGS personnel during this investigation.










ADVANCED GEOLOGICAL SERVICES

2016 Orthophotograph of the Site Showing Color Contoured Quadrature (Terrain Conductivity) EM Results, Identified Utilities, and Site Features

LOCATION: 372 Riverdale Avenue & 13 Culver Street
Yonkers, NY

CLIENT: Ransom Consulting, Inc.

PROJECT #: 17-175-1

ADVANCED GEOLOGICAL SERVICES, INC.

DATE: July 18, 2017

DRAWN BY: D. JAGEL

APPROVED BY: D. JAGEL

FIGURE 1

**APPENDIX B**

Soil Boring and Temporary Well Point Logs

Phase II Limited Subsurface Investigation
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-1

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Hand-augered | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Hand-augered | Total Depth: 4 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 3.0-3.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | - | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | SB-1 | | 0.00 | | |
| 4 | | | | 0.00 | | |
| 5 | | | | | **End of Boring - 4 feet bgs** | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-2

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/29/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/29/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 5 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-2 | | 0.00 | Brown SILT, trace fine sand and gravel | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 24 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| 6 | | | | | **End of Boring - 5 feet bgs** | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-3

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 5 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-3 | | 0.00 | Brown SILT, trace fine sand, some gravel | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 24 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| 6 | | | | | **End of Boring - 5 feet bgs** | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-6

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/29/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/29/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs and 8.0 8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-6A | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 24 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Tan and brown fine SAND, some silt | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 36 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | SB-6B | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | Red and brown fine SAND, some silt | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-7

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 8.5-9.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | | | 0.00 | Brown dry SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 48 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 6 | | | | 0.00 | Brown SILT, some fine sand | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 36 | 0.00 | Brown and tan silty SAND | Moisture noted |
| 8 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 9 | | SB-7 | | 0.00 | | |
| | | | | 0.00 | Brown medium SAND | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-8

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs and 8.0-8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-8A | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 6 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Brown SILT, some fine sand | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 36 | 0.00 | Brown and tan fine SAND, trace silt | |
| 8 | | | | 0.00 | | |
| | | SB-8B | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-9

Page 1 of 1

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|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs and 8.0-8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-9A | | 0.00 | Brown SILT, trace fine SAND, some gravel | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 6 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Tan and brown fine SAND and silt | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 36 | 0.00 | | Moisture noted |
| 8 | | | | 0.00 | | |
| | | SB-9B | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-10

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 8.5-9.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 12 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 6 | | | | 0.00 | Tan and brown fine SAND and silt | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 8 | | | 54 | 0.00 | | |
| | | | | 0.00 | | |
| 9 | | SB-10 | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-11

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs and 8.0-8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-11A | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 24 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | Brown silty fine SAND | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 42 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | SB-11B | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-12

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 8.0-8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 24 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Brown and tan fine SAND, some silt | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 42 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | SB-12 | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-13

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs and 8.0-8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-13A | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 36 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Brown and tan fine sand, some silt | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 36 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | SB-13B | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-14

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/29/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/29/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 3 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs and 1.5-2.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-14A | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | Fill material (red brick) | |
| 2 | | SB-14B | 24 | 0.00 | | |
| | | | | 0.00 | Brown SILT, trace fine sand | |
| 3 | | | | 0.00 | | |
| 4 | | | | | **End of Boring - 3 feet bgs** | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-15

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 5 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-15 | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 36 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| 6 | | | | | **End of Boring - 5 feet bgs** | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-16

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 5 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-16 | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 42 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| 6 | | | | | **End of Boring - 5 feet bgs** | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
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| 22 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-17

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/28/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/28/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 8.0-8.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Asphalt | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 15 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Brown and tan SILT, some fine sand | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 30 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | SB-17 | | 0.00 | Tan medium SAND | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
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| 25 | | | | | | |

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-18

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/28/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/28/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 7.0-7.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Asphalt | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 30 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Tan and brown fine SAND, some silt | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | SB-18 | 42 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-19

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 5 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-19 | | 0.00 | Brown SILT, trace fine sand, some gravel | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 24 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| 6 | | | | | **End of Boring - 5 feet bgs** | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
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| 25 | | | | | | |

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-20

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/28/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/28/2017 |
| Project No.: 111.02013 | Location: 13 Culver Street, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 8 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.0-0.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| 1 | | SB-20 | 18 | 0.00 | Top soil and organic material | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | Brown SILT, trace fine sand and gravel | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 6 | | | 36 | 0.00 | Tan fine SAND, some silt | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 8 | | | | 0.00 | | Drilling Refusal at 8.0 feet bgs |
| 9 | | | | | **End of Boring - 8 feet bgs** | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
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| 25 | | | | | | |

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-21

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/28/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/28/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 2.5-3.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | | | 0.00 | Brown SILT, some gravel | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | SB-21 | 24 | 0.00 | Fill material (red brick) | Historic fill sample collected |
| | | | | 0.00 | Brown SILT, some fine sand | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 8 | | | 24 | 0.00 | | |
| | | | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
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RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-22

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/27/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/27/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 15 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 1.0-1.5 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | SB-22 | | 0.00 | Fill material (red brick) | Sample collected for historic fill |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | Brown SILT, trace fine sand | |
| 3 | | | 6 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | Brown silty fine SAND | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 7 | | | | 0.00 | | |
| | | | 24 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | Grey medium SAND, some silt | |
| 10 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 11 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 12 | | | | 0.00 | | |
| | | | 36 | 0.00 | | |
| 13 | | | | 0.00 | | |
| | | | | 0.00 | Orange coarse SAND | |
| 14 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 15 | | | | 0.00 | | |
| 16 | | | | | **End of Boring - 15 feet bgs** | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-23

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/28/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/28/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 15 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 3.5-4.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Asphalt | |
| 1 | | | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | 36 | 0.00 | | |
| 3 | | | | 0.00 | | |
| | | | | 6.80 | | |
| 4 | | SB-23 | | - | | Odors noted |
| | | | | 5.30 | | Odors noted |
| 5 | | | | - | | |
| | | | | 0.00 | Brown fine SAND, some silt | |
| 6 | | | | - | | |
| | | | | 3.20 | | |
| 7 | | | | - | | |
| | | | 42 | 0.00 | Tan and brown fine SAND | Moisture noted |
| 8 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | Brown medium SAND | |
| 10 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 11 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 12 | | | | 0.00 | | |
| | | | 36 | 0.00 | Brown coarse SAND | |
| 13 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 14 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 15 | | | | 0.00 | | |
| 16 | | | | | **End of Boring - 15 feet bgs** | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-24

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/29/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/29/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 10 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Asphalt | |
| 1 | | SB-24 | | 0.00 | Black and brown SILT and fine sand, trace fill material (red brick) | Historic fill sample collected. |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 30 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | Brown SILT, some fine sand | |
| 5 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 6 | | | | 0.00 | | |
| | | | | 0.00 | Brown medium SAND, some brown silt | |
| 7 | | | | 0.00 | | |
| | | | 42 | 0.00 | | |
| 8 | | | | 0.00 | | |
| | | | | 0.00 | Brown SILT, trace fine sand | |
| 9 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 10 | | | | 0.00 | | Composite sample SB-24C collected. |
| 11 | | | | | **End of Boring - 10 feet bgs** | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |

RANSOM Consulting, Inc.

# Soil Boring Log

Boring No.: SB-25

Page 1 of 1

| | | |
|---|---|---|
| Client: CVS Pharmacy, Inc. | | Date Start: 6/29/2017 |
| Project Name: CVS - Yonkers (Riverdale) | | Date Finish: 6/29/2017 |
| Project No.: 111.02013 | Location: 372 Riverdale Avenue, Yonkers NY | Permit No.: NA |
| Drilling Contractor: Environmental Probing Investigations Inc. | | Ground Elevation: NA |
| Driller: Carl Farley | Drilling Method: Direct Push via GeoProbe | Datum: NA |
| Hole Diameter: 4 inches | Sampling Method: Acetate-Lined Macro-Core Liners | Total Depth: 5 feet bgs |
| Logged By: Lauren Rojewski | Sample Interval: 0.5-1.0 feet bgs | Hammer wt./fall: NA |

| Depth (ft) | Blow Counts | Sample No. | Recovery (inches) | PID/FID (ppm) | Lithologic Description | Remarks |
|---|---|---|---|---|---|---|
| | | | | 0.00 | Concrete | |
| 1 | | SB-25 | | 0.00 | Brown SILT, trace fine sand | |
| | | | | 0.00 | | |
| 2 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 3 | | | 36 | 0.00 | | |
| | | | | 0.00 | | |
| 4 | | | | 0.00 | | |
| | | | | 0.00 | | |
| 5 | | | | 0.00 | | |
| 6 | | | | | **End of Boring - 5 feet bgs** | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |

RANSOM Consulting, Inc.

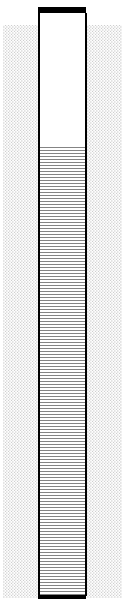
# TEMPORARY WELL LOG

| | | | |
|---|---|---|---|
| Project: CVS - Yonkers (Riverdale) | Well Permit Number: N/A | Well No./Boring: | TWP-1/SB-23 |
| Project No.: 111.02013 | Drilling Co.: EPI Inc. | Lock No.: N/A | |
| Site Location: 372 Riverdale Avenue, Yonkers NY | Driller: Carl Farley | Start Date: 6/28/2017 | |
| Geologist: Lauren Rojewski | Drilling Method: Direct Push | Date Complete: 6/28/2017 | |
| Ground Elev.: N/A | Drilling Equip: GeoProbe 7720 DT | Total Boring Depth: 20 feet bgs | |
| Top of Casing Elev.: N/A | Static Water (feet bgs): 8.0 | Product Thickness: NA | |

Remarks: Well installed within soil boring SB-23 location.

| GEOLOGIC LOG | Depth (ft.) | Blow/6 inches | Recovery (ft.) | PID (ppm) | Sample |
|---|---|---|---|---|---|
| Asphalt, brown SILT, trace fine sand | 0.0-1.0 | | | 0.0 | |
| | 1.0-2.0 | | | 0.0 | |
| | 2.0-3.0 | | 36 | 0.0 | |
| | 3.0-4.0 | | | 6.8 | SB-23 |
| | 4.0-5.0 | | | 5.3 | |
| Brown fine SAND, some silt | 5.0-6.0 | | | 0.0 | |
| | 6.0-7.0 | | | 3.2 | |
| Tan and brown fine SAND | 7.0-8.0 | | 42 | 0.0 | |
| | 8.0-9.0 | | | 0.0 | |
| Brown medium SAND | 9.0-10.0 | | | 0.0 | |
| | 10.0-11.0 | | | 0.0 | |
| | 11.0-12.0 | | | 0.0 | |
| Brown coarse SAND | 12.0-13.0 | | 36 | 0.0 | |
| | 13.0-14.0 | | | 0.0 | |
| | 14.0-15.0 | | | 0.0 | |
| | 15.0-16.0 | | | 0.0 | |
| | 16.0-17.0 | | | 0.0 | |
| | 17.0-18.0 | | - | 0.0 | |
| | 18.0-19.0 | | | 0.0 | |
| | 19.0-20.0 | | | 0.0 | |
| **End of Boring - 20 feet bgs** | 20.0-21.0 | | | | |
| | 21.0-22.0 | | | | |
| | 22.0-23.0 | | | | |
| | 23.0-24.0 | | | | |
| | 24.0-25.0 | | | | |
| | 25.0-26.0 | | | | |
| | 26.0-27.0 | | | | |
| | 27.0-28.0 | | | | |
| | 28.0-29.0 | | | | |
| | 29.0-30.0 | | | | |
| | 30.0-31.0 | | | | |
| | 31.0-32.0 | | | | |
| | 32.0-33.0 | | | | |
| | 33.0-34.0 | | | | |
| | 34.0-35.0 | | | | |
| | 35.0-36.0 | | | | |
| | 36.0-37.0 | | | | |
| | 37.0-38.0 | | | | |
| | 38.0-39.0 | | | | |
| | 39.0-40.0 | | | | |

**AS-BUILT WELL SCHEMATIC**



Well Material: Schedule 40 PVC
Well casing stickup: 3 inches
Well casing diameter: 1 inch
Well casing length: 5 feet
Grout length: N/A

Gravel pack length: N/A
Gravel pack size: N/A

Well Screen Material: Sch. 40 PVC
Well Screen diameter: 1 inch
Well screen length: 15 feet
Well slot size: 0.010 slot
Total Well Depth: 19.75 feet
Bore hole diameter: 4 inches
Bore hole depth: 20 feet

# TEMPORARY WELL LOG

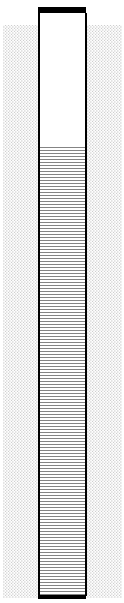
RANSOM Consulting, Inc.

| | | | |
|---|---|---|---|
| Project: CVS - Yonkers (Riverdale) | Well Permit Number: N/A | Well No./Boring: | TWP-2/SB-22 |
| Project No.: 111.02013 | Drilling Co.: EPI Inc. | Lock No.: N/A | |
| Site Location: 372 Riverdale Avenue, Yonkers NY | Driller: Carl Farley | Start Date: 6/27/2017 | |
| Geologist: Lauren Rojewski | Drilling Method: Direct Push | Date Complete: 6/27/2017 | |
| Ground Elev.: N/A | Drilling Equip: GeoProbe 7720 DT | Total Boring Depth: 20 feet bgs | |
| Top of Casing Elev.: N/A | Static Water (feet bgs): 8.0 | Product Thickness: NA | |

Remarks: Well installed within soil boring SB-22 location.

| GEOLOGIC LOG | Depth (ft.) | Blow/6 inches | Recovery (ft.) | PID (ppm) | Sample |
|---|---|---|---|---|---|
| Concrete, brown SILT, trace fine sand | 0.0-1.0 | | | 0.0 | |
| Fill material, red brick | 1.0-2.0 | | | 0.0 | SB-22 |
| Brown SILT, trace fine sand | 2.0-3.0 | | 6 | 0.0 | |
| | 3.0-4.0 | | | 0.0 | |
| | 4.0-5.0 | | | 0.0 | |
| Brown silty fine SAND | 5.0-6.0 | | | 0.0 | |
| | 6.0-7.0 | | | 0.0 | |
| | 7.0-8.0 | | 24 | 0.0 | |
| | 8.0-9.0 | | | 0.0 | |
| Grey medium SAND, some silt | 9.0-10.0 | | | 0.0 | |
| | 10.0-11.0 | | | 0.0 | |
| | 11.0-12.0 | | | 0.0 | |
| | 12.0-13.0 | | 36 | 0.0 | |
| Orange coarse SAND | 13.0-14.0 | | | 0.0 | |
| | 14.0-15.0 | | | 0.0 | |
| | 15.0-16.0 | | | 0.0 | |
| | 16.0-17.0 | | | 0.0 | |
| | 17.0-18.0 | | - | 0.0 | |
| | 18.0-19.0 | | | 0.0 | |
| | 19.0-20.0 | | | 0.0 | |
| **End of Boring - 20 feet bgs** | 20.0-21.0 | | | | |
| | 21.0-22.0 | | | | |
| | 22.0-23.0 | | | | |
| | 23.0-24.0 | | | | |
| | 24.0-25.0 | | | | |
| | 25.0-26.0 | | | | |
| | 26.0-27.0 | | | | |
| | 27.0-28.0 | | | | |
| | 28.0-29.0 | | | | |
| | 29.0-30.0 | | | | |
| | 30.0-31.0 | | | | |
| | 31.0-32.0 | | | | |
| | 32.0-33.0 | | | | |
| | 33.0-34.0 | | | | |
| | 34.0-35.0 | | | | |
| | 35.0-36.0 | | | | |
| | 36.0-37.0 | | | | |
| | 37.0-38.0 | | | | |
| | 38.0-39.0 | | | | |
| | 39.0-40.0 | | | | |

**AS-BUILT WELL SCHEMATIC**



Well Material: Schedule 40 PVC
Well casing stickup: 17 inches
Well casing diameter: 1 inch
Well casing length: 5 feet
Grout length: N/A

Gravel pack length: N/A
Gravel pack size: N/A

Well Screen Material: Sch. 40 PVC
Well Screen diameter: 1-inch
Well screen length: 15 feet
Well slot size: 0.010 slot
Total Well Depth: 18.50 feet
Bore hole diameter: 4 inches
Bore hole depth: 20 feet

**APPENDIX C**

Laboratory Analytical Reports

Phase II Limited Subsurface Investigation
Proposed CVS Pharmacy/Store No. 10386
13 Culver Street and 372 Riverdale Avenue
Section 1, Block 129, Lots 26 and 30
City of Yonkers, Westchester County, New York

Clear Form

# ASTM E1527-21 User Questionnaire

*Please complete the below form and return to Langan.*

Providing the following information (if available) to the environmental professional (Langan) is one of the requirements to qualify for one of the Landowner Liability Protections (LLP) offered under CERCLA. Missing or incomplete information for questions 1 through 6 could result in a determination that "all appropriate inquiry" is not complete. Additional information should be provided for "Yes" answers where relevant.

## General Information

**User/Client Names:** Claudius Development LLC

**Reason for the Phase I ESA:**

**Type of property:** Auto Repair

**Type of property transaction (e.g. sale, purchase, exchange):** Purchase

**Subject property address (provide documentation of subject property boundary):**
372 Riverdale Avenue and 13 Culver Street, Yonkers, New York 10705

**Site Contact and Contact Information:** John Saraceno

**Relying Party(ies):** NYS HCR, Westchester County

## Required Information

**(1.) Environmental liens that are filed or recorded against the subject property (40 CFR 312.25).**

Did a search of recorded land title records (or judicial records where appropriate) identify any environmental liens filed or recorded against the subject property under federal, tribal, state or local law?

Yes ○ No ◉

**(2.) Activity and use limitations that are in place on the subject property or that have been filed or recorded against the subject property (40 CFR 312.26(a)(1)(v) and (vi)).**

Did a search of recorded land title records (or judicial records where appropriate) identify any AULs, such as engineering controls, land use restrictions or institutional controls that are in place at the subject property and/or have been filed or recorded against the subject property under federal, tribal, state or local law?

Yes ○ No ◉

**(3.) Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).**

Do you have any specialized knowledge or experience related to the subject property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the subject property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

Yes ○ No ◉

**(4.) Relationship of the purchase price to the fair market value of the subject property if it were not contaminated (40 CFR 312.29).**

Does the purchase price being paid for this subject property reasonably reflect the fair market value of the subject property?

Yes ◉ No ○

If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the subject property?

Yes ○ No ◉

**(5.) Commonly known or reasonably ascertainable information about the subject property (40 CFR 312.30).**

| | Yes | No |
|---|---|---|
| Are you aware of commonly known or reasonably ascertainable information about the subject property that would help the environmental professional to identify conditions indicative of releases or threatened releases? | ◉ | ○ |
| For example, | | |
| (a.) Do you know the past uses of the subject property? | ◉ | ○ |
| (b.) Do you know of specific chemicals that are present or once were present at the subject property? | ○ | ◉ |
| (c.) Do you know of spills or other chemical releases that have taken place at the subject property? | ◉ | ○ |
| (d.) Do you know of any environmental cleanups that have taken place at the subject property? | ○ | ◉ |

**(6.) The degree of obviousness of the presence or likely presence of contamination at the subject property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).**

| | Yes | No |
|---|---|---|
| Based on your knowledge and experience related to the subject property, are there any obvious indicators that point to the presence or likely presence of releases at the subject property? | ○ | ◉ |
| Do you have knowledge or experience with the subject property that may be pertinent to the environmental professional (for example, copies of any available prior environmental site assessment reports, documents, correspondence, etc., concerning the property and its environmental condition)? | ◉ | ○ |

**(7.) Proceedings Involving the Subject Property Questions (Section 10.9 of ASTM E1527-21 and Section 10.10 of ASTM E2247-16)**

| Do you know of: | Yes | No |
|---|---|---|
| (a.) Any pending, threatened, or past litigation relevant to hazardous substances or petroleum products in, on, or from the subject property? | ○ | ◉ |
| (b.) Any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on, at, or from the subject property? | ○ | ◉ |
| (c) Any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products? | ○ | ◉ |

**Signature**

It is understood that the information presented in this form is an integral part of the Phase I ESA process and that Langan will evaluate and rely on this information in the development of the final Phase I ESA report.

Completed By: _____

Print/Type Name: John Saraceno

Title: Authorized Signatory

Company: Claudius Development LLC

Relationship to Client/User: Client

Date: 4/6/26

# APPENDIX E

13 Culver St and 372 Riverdale Ave

372 Riverdale Avenue

Yonkers, NY 10705

Inquiry Number: 8299671.4

April 01, 2026

# EDR Historical Topo Map Report

## with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Historical Topo Map Report

04/01/26

**Site Name:**

13 Culver St and 372 Riverdale
372 Riverdale Avenue
Yonkers, NY 10705
EDR Inquiry # 8299671.4

**Client Name:**

Langan
368 Ninth Avenue, 8th Floor
New York, NY 10001-2727
Contact: Jennifer Armstrong

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Langan were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

***Search Results:***

**P.O.#** NA

**Project:** 190141301

***Coordinates:***

| | |
|---|---|
| **Latitude:** | 40.919652 40° 55' 11" North |
| **Longitude:** | -73.900562 -73° 54' 2" West |
| **UTM Zone:** | Zone 18 North |
| **UTM X Meters:** | 592577.43 |
| **UTM Y Meters:** | 4530419.56 |
| **Elevation:** | 51.86' above sea level |

**Maps Provided:**

| | |
|---|---|
| 2023 | 1947 |
| 2019 | 1900 |
| 2016 | 1898 |
| 2013 | 1897 |
| 1995, 1998 | |
| 1979 | |
| 1966 | |
| 1956 | |

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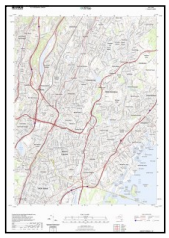
## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 2023 Source Sheets



Yonkers
2023
7.5-minute, 24000

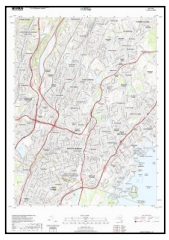


Mount Vernon
2023
7.5-minute, 24000

### 2019 Source Sheets



Yonkers
2019
7.5-minute, 24000

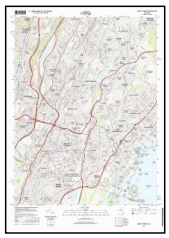


Mount Vernon
2019
7.5-minute, 24000

### 2016 Source Sheets



Yonkers
2016
7.5-minute, 24000



Mount Vernon
2016
7.5-minute, 24000

### 2013 Source Sheets



Yonkers
2013
7.5-minute, 24000

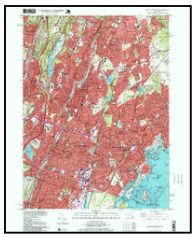


Mount Vernon
2013
7.5-minute, 24000

## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1995, 1998 Source Sheets

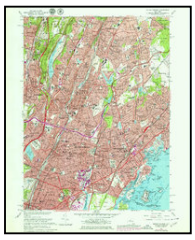


Mount Vernon
1995
7.5-minute, 24000
Aerial Photo Revised 1977



Yonkers
1998
7.5-minute, 24000
Aerial Photo Revised 1966

### 1979 Source Sheets



Mount Vernon
1979
7.5-minute, 24000
Aerial Photo Revised 1977



Yonkers
1979
7.5-minute, 24000
Aerial Photo Revised 1977

### 1966 Source Sheets



Mount Vernon
1966
7.5-minute, 24000
Aerial Photo Revised 1966



Yonkers
1966
7.5-minute, 24000
Aerial Photo Revised 1954

### 1956 Source Sheets



Mount Vernon
1956
7.5-minute, 24000
Aerial Photo Revised 1954



Yonkers
1956
7.5-minute, 24000
Aerial Photo Revised 1954

## *Topo Sheet Key*

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

### 1947 Source Sheets



Mt Vernon
1947
7.5-minute, 24000
Aerial Photo Revised 1941



Yonkers
1947
7.5-minute, 24000
Aerial Photo Revised 1941

### 1900 Source Sheets



Harlem
1900
15-minute, 62500

### 1898 Source Sheets

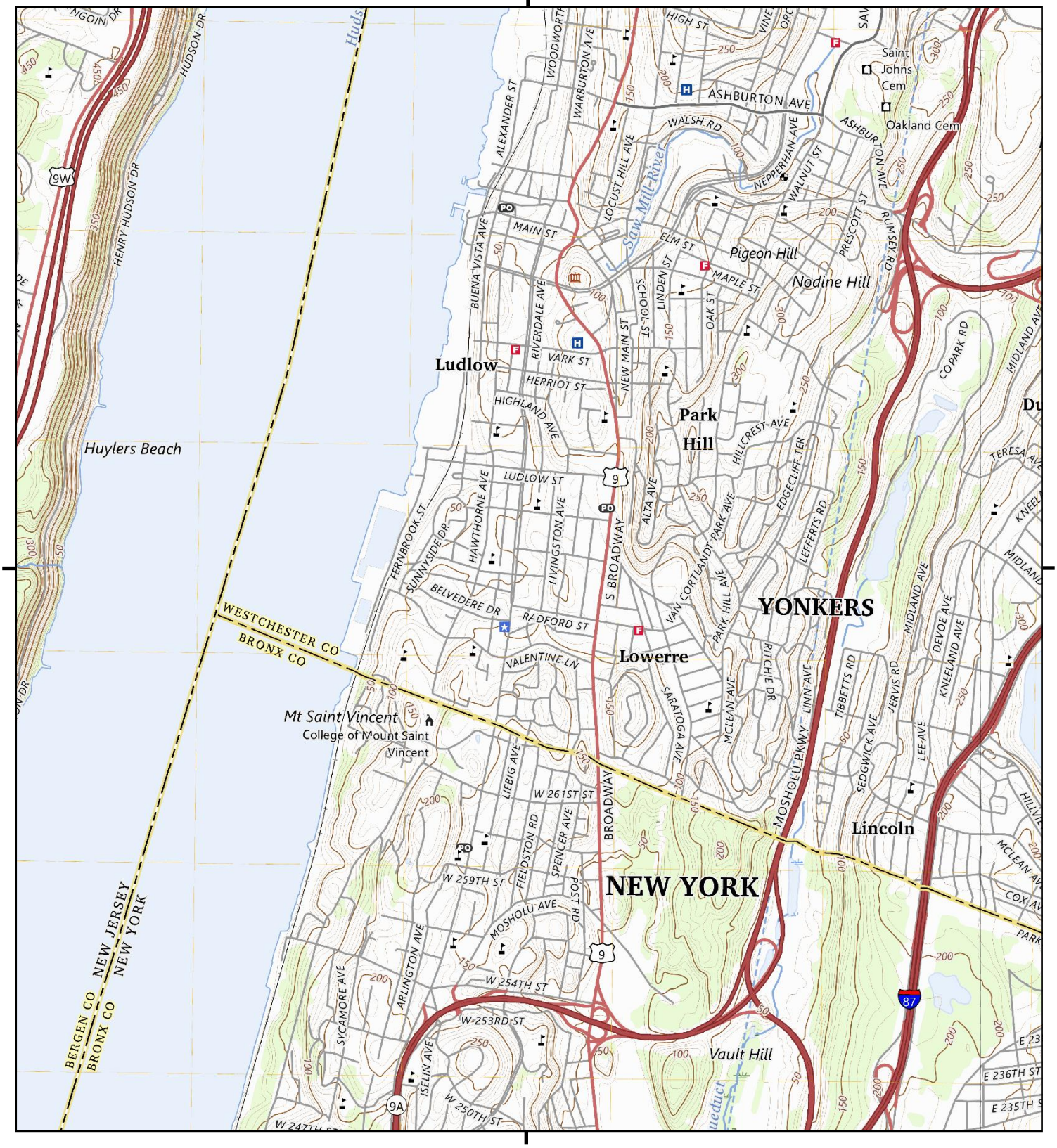


Harlem
1898
15-minute, 62500

### 1897 Source Sheets



Harlem
1897
15-minute, 62500




This report includes information from the following map sheet(s).

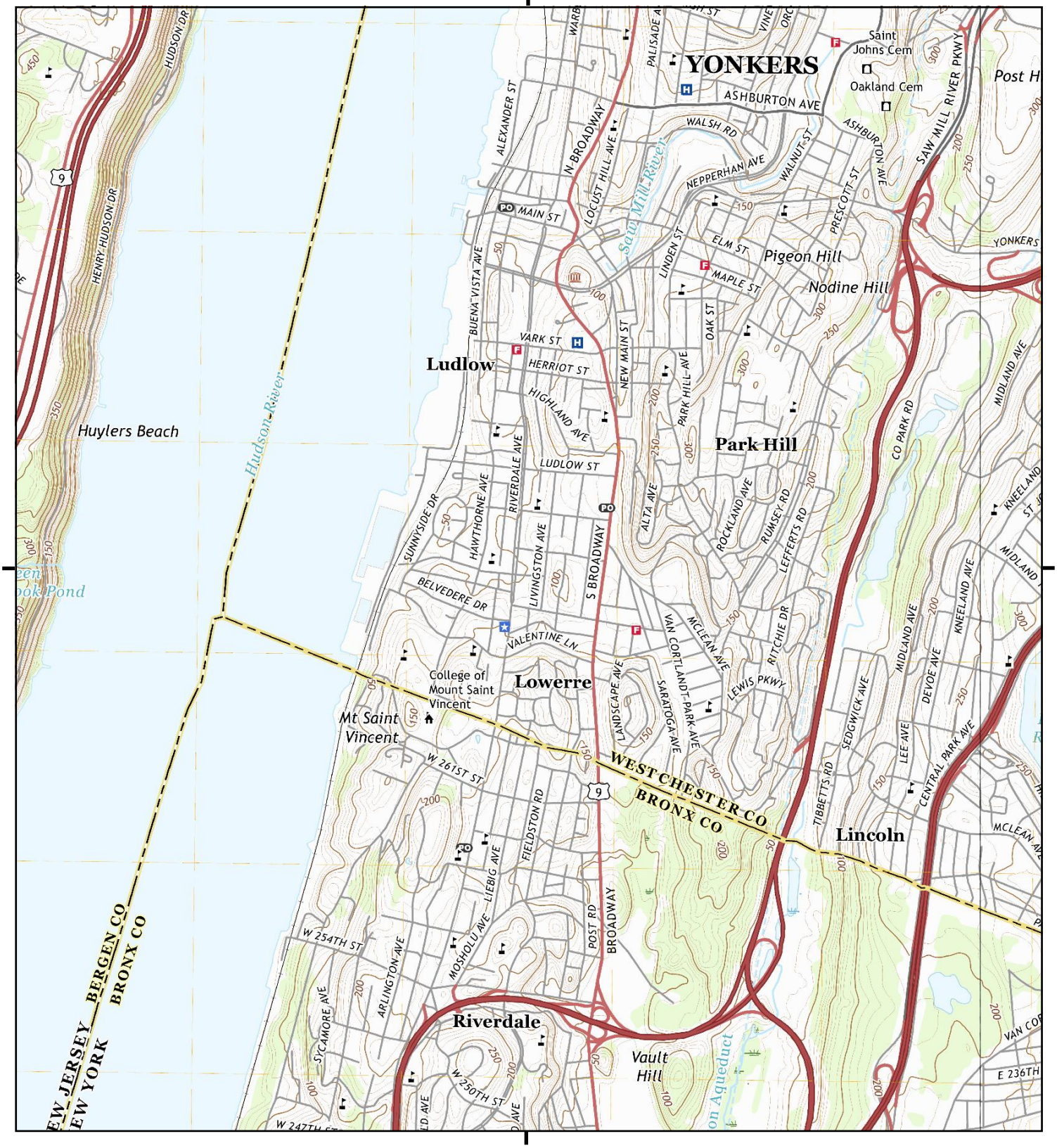
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Yonkers, 2023, 7.5-minute
E, Mount Vernon, 2023, 7.5-minute

SITE NAME: 13 Culver St and 372 Riverdale Ave
ADDRESS: 372 Riverdale Avenue
Yonkers, NY 10705
CLIENT: Langan

N




This report includes information from the following map sheet(s).

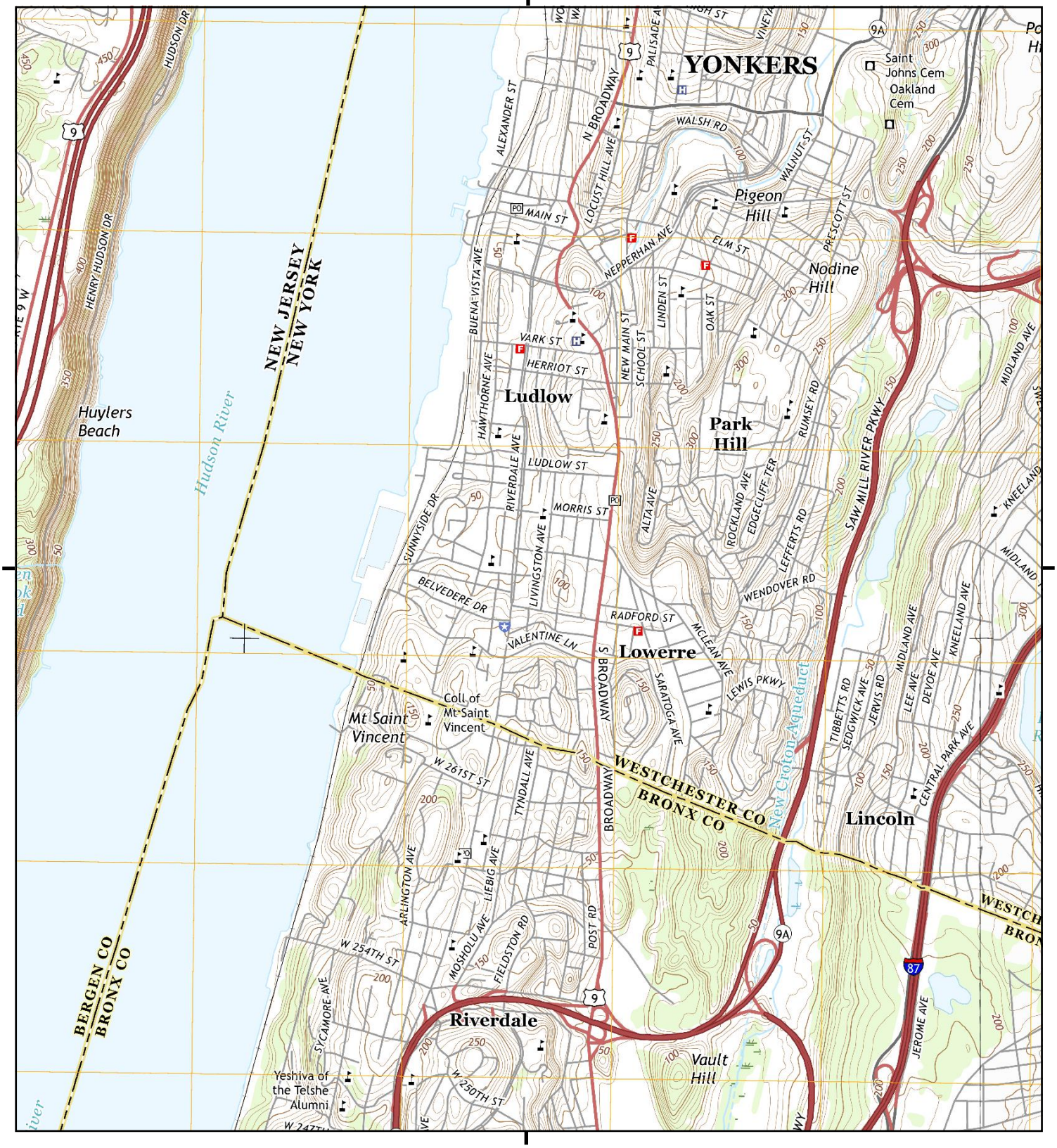
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Yonkers, 2019, 7.5-minute
E, Mount Vernon, 2019, 7.5-minute

SITE NAME: 13 Culver St and 372 Riverdale Ave
ADDRESS: 372 Riverdale Avenue
Yonkers, NY 10705
CLIENT: Langan

N




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Yonkers, 2016, 7.5-minute
E, Mount Vernon, 2016, 7.5-minute

SITE NAME: 13 Culver St and 372 Riverdale Ave
ADDRESS: 372 Riverdale Avenue
Yonkers, NY 10705
CLIENT: Langan

N




This report includes information from the following map sheet(s).

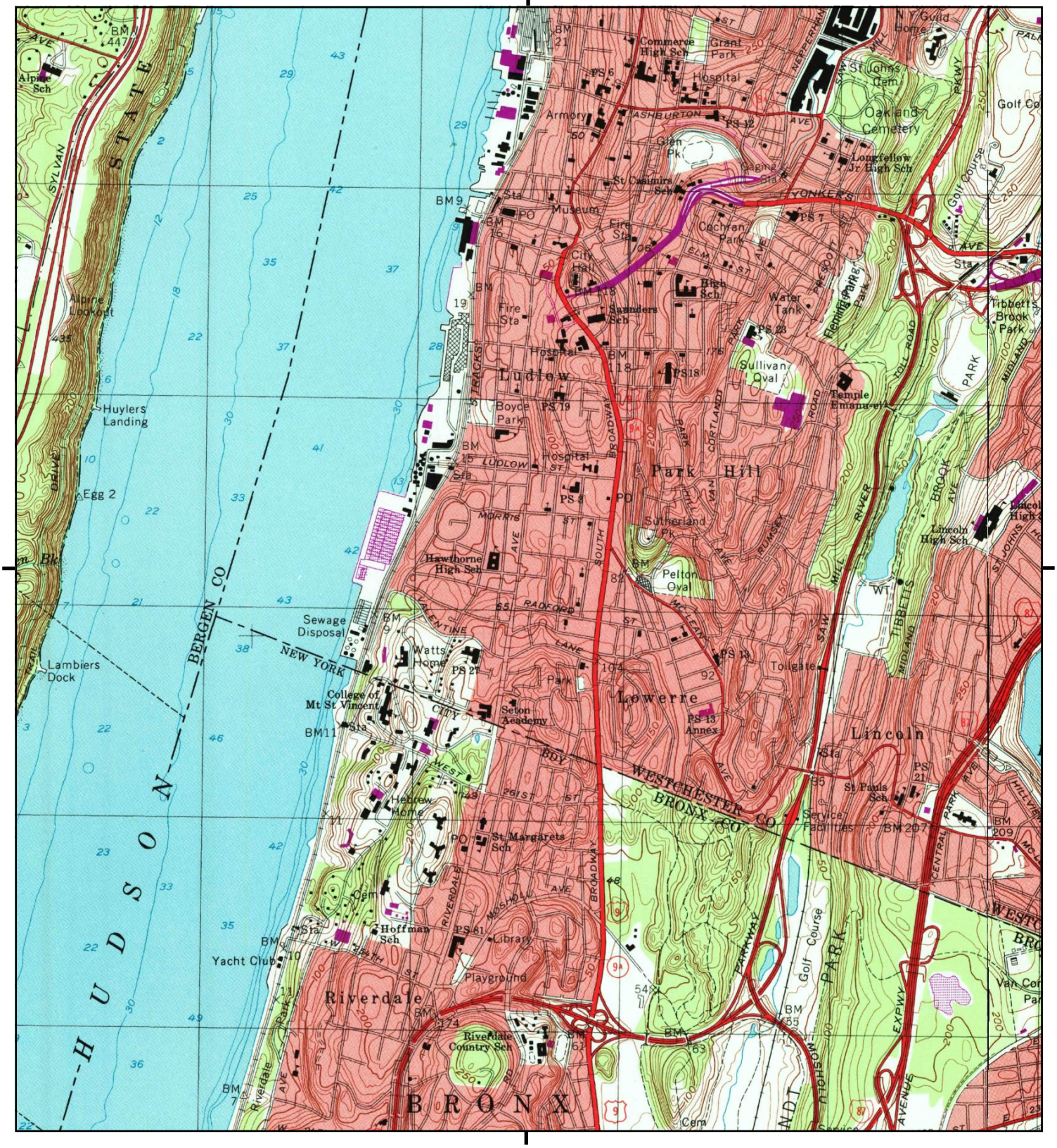
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Yonkers, 2013, 7.5-minute
E, Mount Vernon, 2013, 7.5-minute

SITE NAME: 13 Culver St and 372 Riverdale Ave
ADDRESS: 372 Riverdale Avenue
Yonkers, NY 10705
CLIENT: Langan

N




This report includes information from the following map sheet(s).

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NW N NE
W E
SW S SE

TP, Yonkers, 1998, 7.5-minute
E, Mount Vernon, 1995, 7.5-minute

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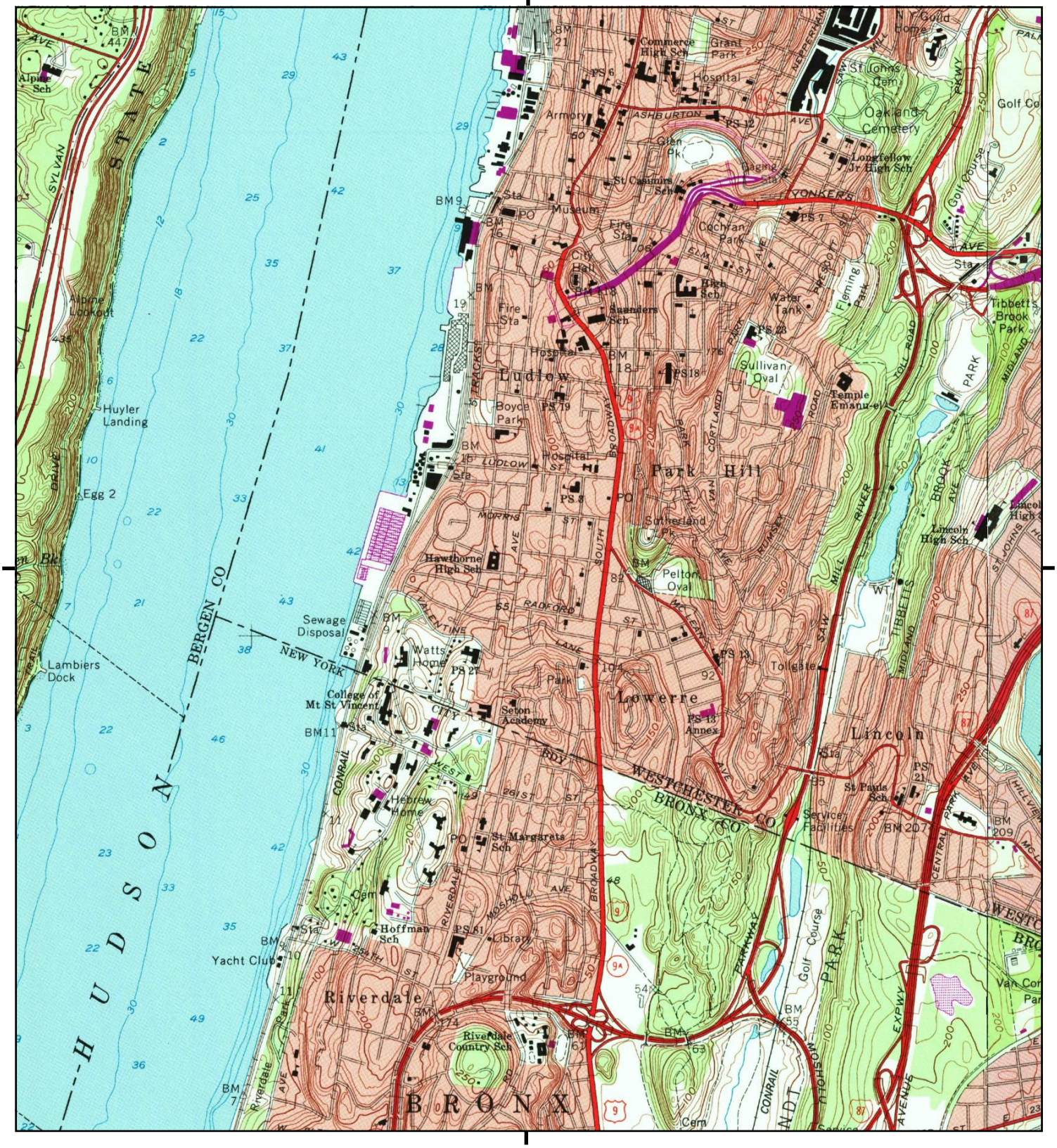
ADDRESS: 372 Riverdale Avenue
Yonkers, NY 10705
CLIENT: Langan

N




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Yonkers, 1979, 7.5-minute
E, Mount Vernon, 1979, 7.5-minute

SITE NAME: 13 Culver St and 372 Riverdale Ave
ADDRESS: 372 Riverdale Avenue
Yonkers, NY 10705
CLIENT: Langan

N




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Yonkers, 1966, 7.5-minute
E, Mount Vernon, 1966, 7.5-minute

SITE NAME: 13 Culver St and 372 Riverdale Ave
ADDRESS: 372 Riverdale Avenue
Yonkers, NY 10705
CLIENT: Langan

N




This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Yonkers, 1956, 7.5-minute
E, Mount Vernon, 1956, 7.5-minute

SITE NAME: 13 Culver St and 372 Riverdale Ave
ADDRESS: 372 Riverdale Avenue
Yonkers, NY 10705
CLIENT: Langan

N

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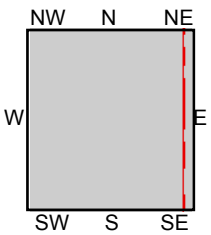
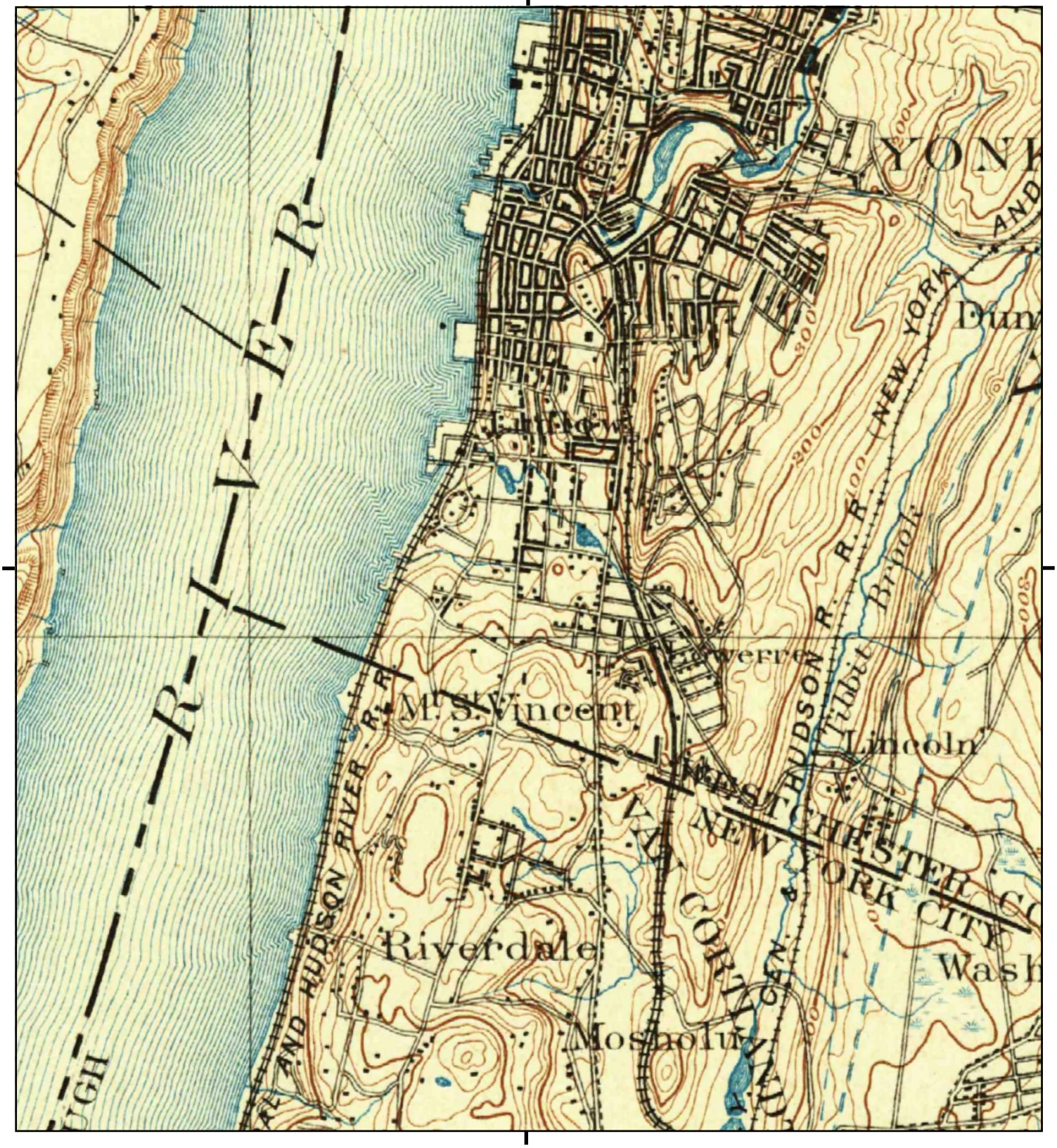
0 Miles 0.25 0.5 1 1.5




TP, Yonkers, 1947, 7.5-minute
E, Mt Vernon, 1947, 7.5-minute

SITE NAME: 13 Culver St and 372 Riverdale Ave
ADDRESS: 372 Riverdale Avenue
Yonkers, NY 10705
CLIENT: Langan

N




This report includes information from the following map sheet(s).

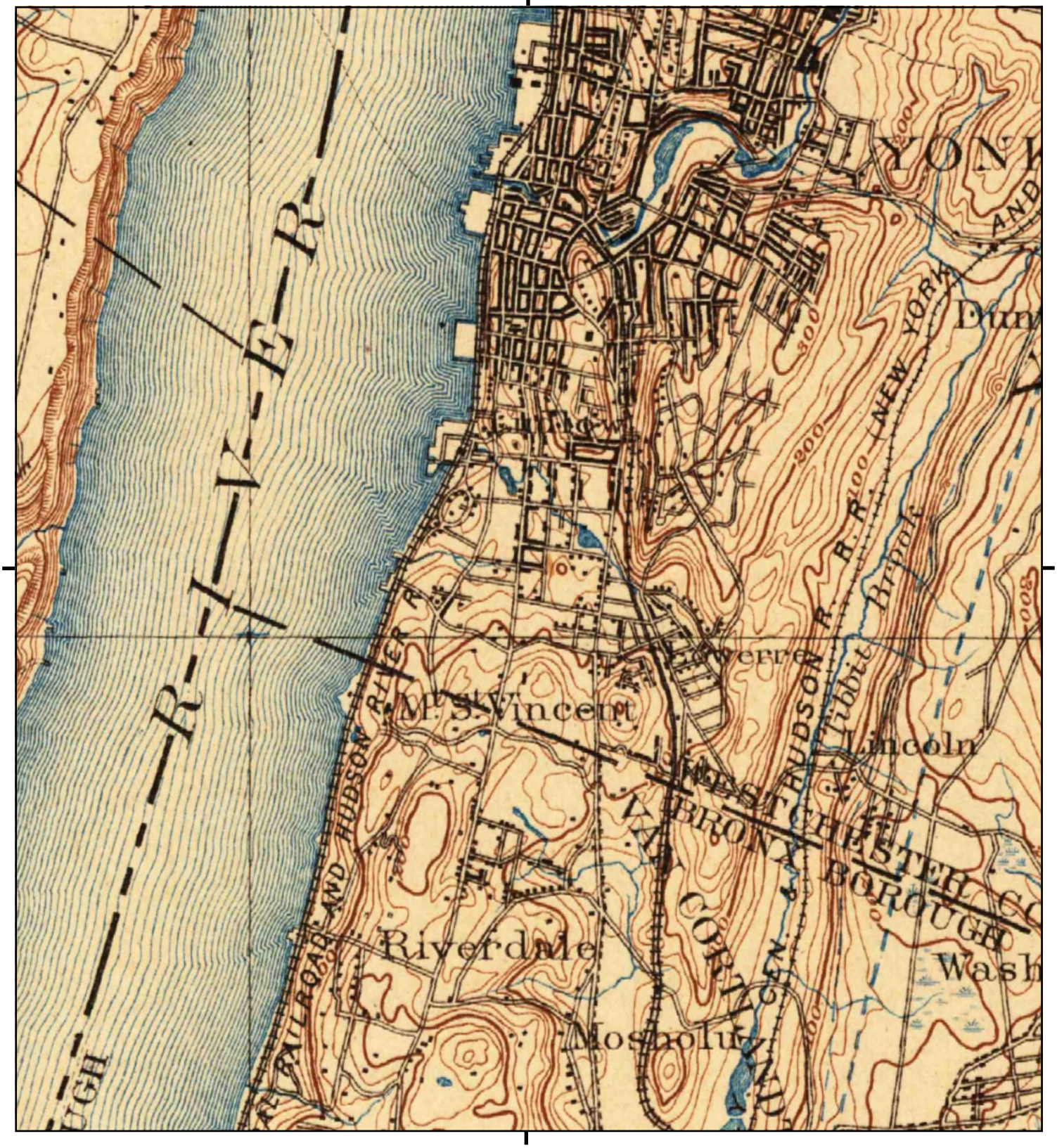
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Harlem, 1900, 15-minute

SITE NAME: 13 Culver St and 372 Riverdale Ave
ADDRESS: 372 Riverdale Avenue
Yonkers, NY 10705
CLIENT: Langan

N




This report includes information from the following map sheet(s).

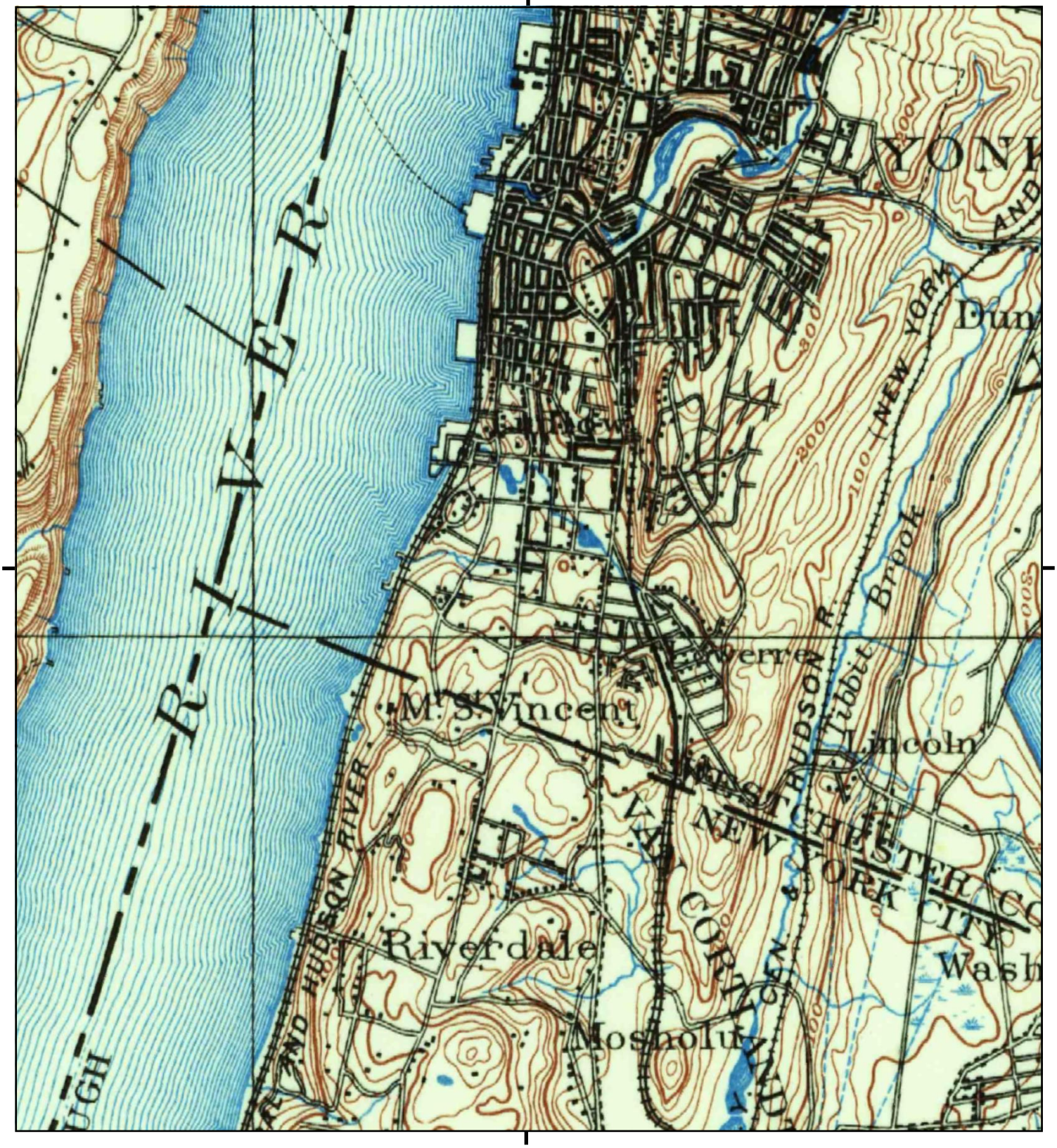
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Harlem, 1898, 15-minute

SITE NAME: 13 Culver St and 372 Riverdale Ave
ADDRESS: 372 Riverdale Avenue
Yonkers, NY 10705
CLIENT: Langan

N

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NW N NE
W E
SW S SE

TP, Harlem, 1897, 15-minute

SITE NAME: 13 Culver St and 372 Riverdale Ave
ADDRESS: 372 Riverdale Avenue
Yonkers, NY 10705
CLIENT: Langan

N

13 Culver St and 372 Riverdale Ave

372 Riverdale Avenue

Yonkers, NY 10705

Inquiry Number: 8299671.3

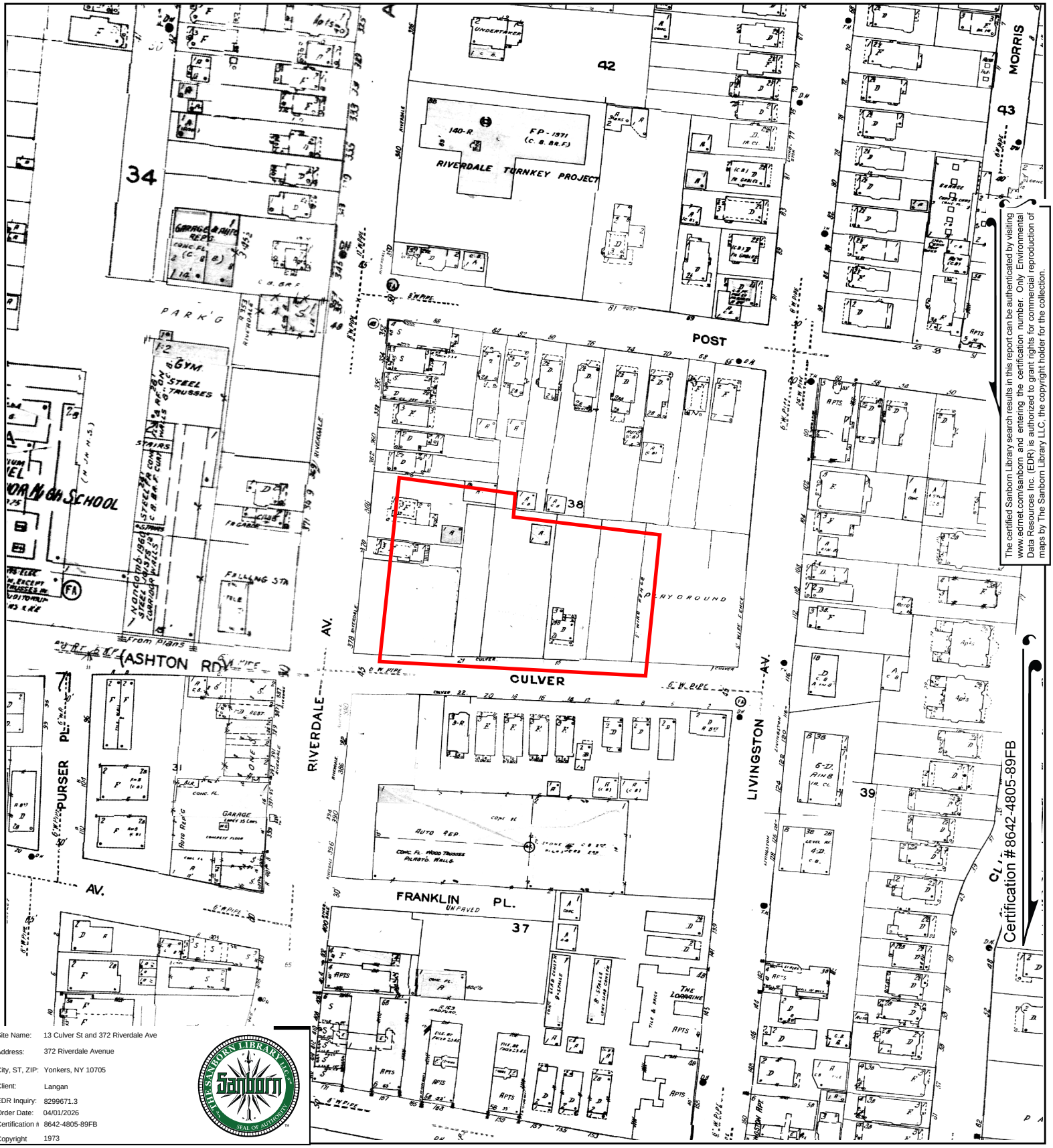
April 01, 2026

# Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# Certified Sanborn® Map

1973

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Certification #8642-4805-89FB

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|---|---|
| Site Name: | 13 Culver St and 372 Riverdale Ave |
| Address: | 372 Riverdale Avenue |
| City, ST, ZIP: | Yonkers, NY 10705 |
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| EDR Inquiry: | 8299671.3 |
| Order Date: | 04/01/2026 |
| Certification #: | 8642-4805-89FB |
| Copyright | 1973 |

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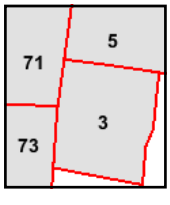


Volume 1, Sheet 73
Volume 1, Sheet 5
Volume 1, Sheet 71
Volume 1, Sheet 3

0 Feet 150 300 600

N




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| Copyright | 1971 |

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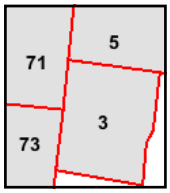
0 Feet 150 300 600






Volume 1, Sheet 71
Volume 1, Sheet 3
Volume 1, Sheet 5
Volume 1, Sheet 73

N

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| City, ST, ZIP: | Yonkers, NY 10705 |
| Client: | Langan |
| EDR Inquiry: | 8299671.3 |
| Order Date: | 04/01/2026 |
| Certification #: | 8642-4805-89FB |
| Copyright | 1957 |

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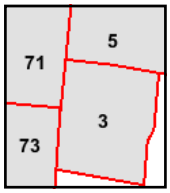
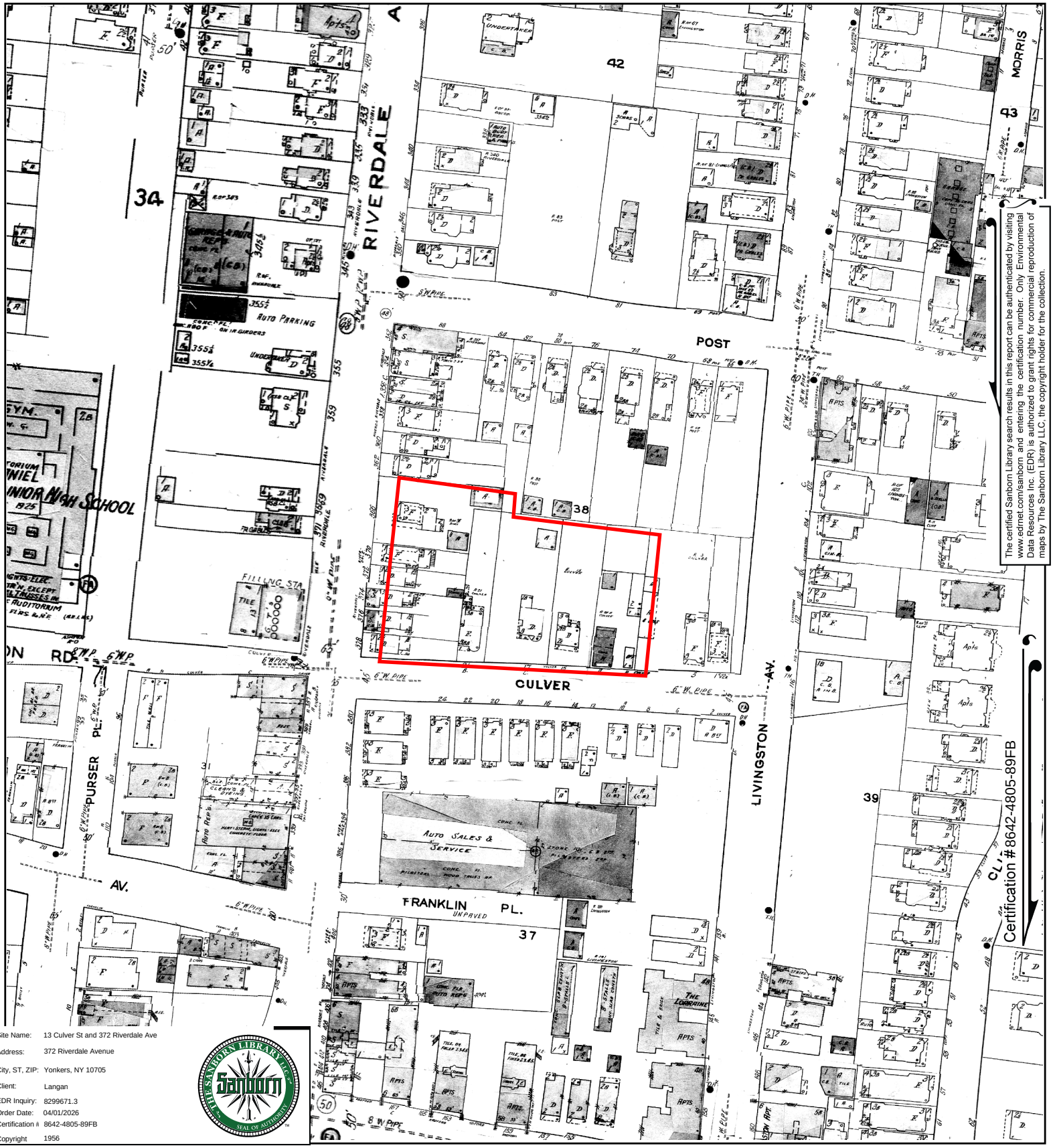



Volume 1, Sheet 73
Volume 1, Sheet 5
Volume 1, Sheet 3
Volume 1, Sheet 71

N

# Certified Sanborn® Map

1956

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| Address: | 372 Riverdale Avenue |
| City, ST, ZIP: | Yonkers, NY 10705 |
| Client: | Langan |
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| Order Date: | 04/01/2026 |
| Certification #: | 8642-4805-89FB |
| Copyright | 1956 |

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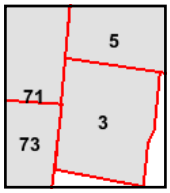
0 Feet 150 300 600



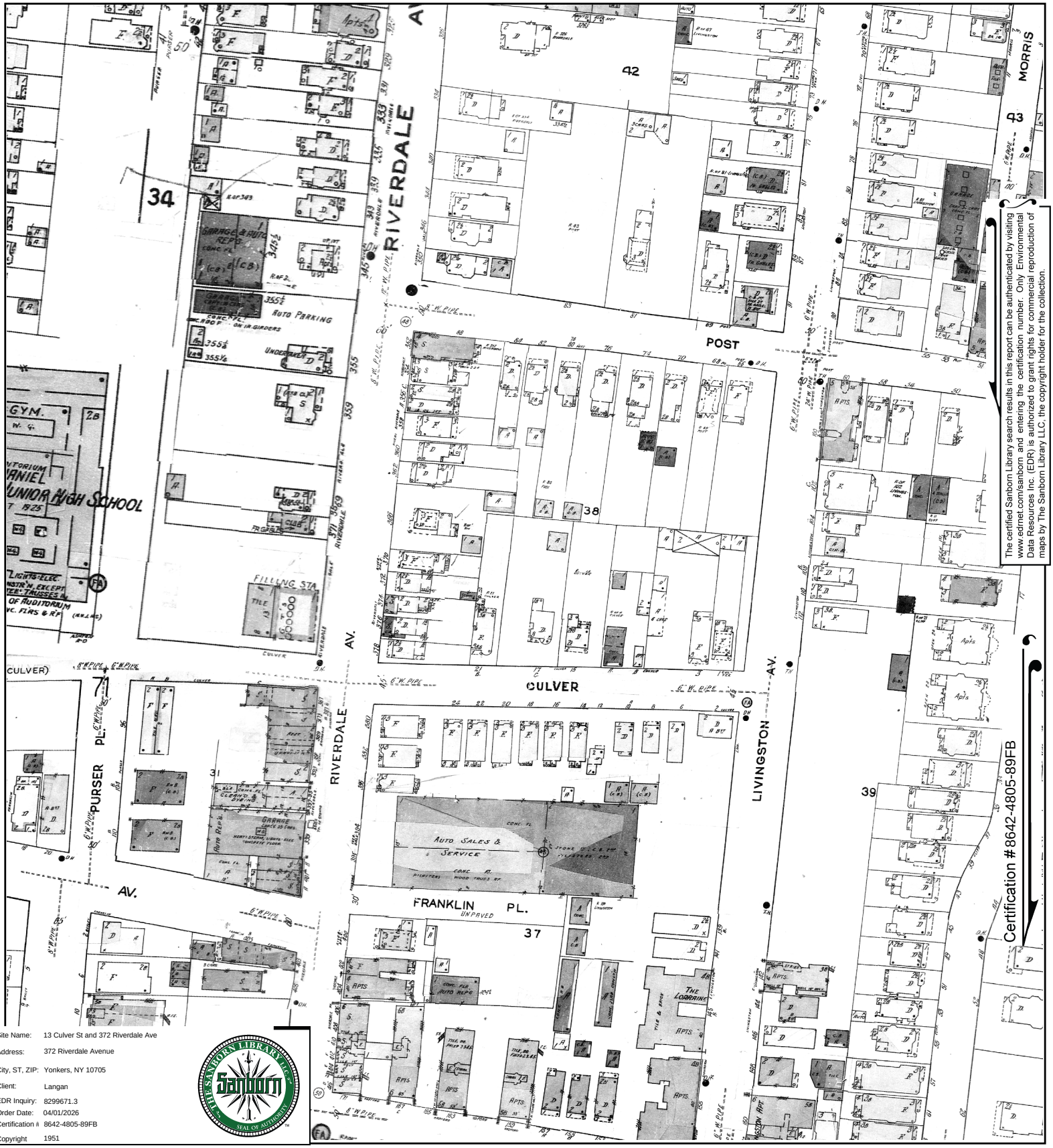



Volume 1, Sheet 5
Volume 1, Sheet 71
Volume 1, Sheet 3
Volume 1, Sheet 73

N

# Certified Sanborn® Map

1951

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| Address: | 372 Riverdale Avenue |
| City, ST, ZIP: | Yonkers, NY 10705 |
| Client: | Langan |
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| Certification #: | 8642-4805-89FB |
| Copyright | 1951 |

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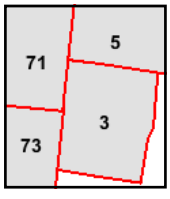


Volume 1, Sheet 5
Volume 1, Sheet 73
Volume 1, Sheet 3
Volume 1, Sheet 71

0 Feet 150 300 600

N




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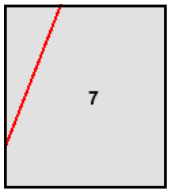
Certification #8642-4805-89FB

| | |
|---|---|
| Site Name: | 13 Culver St and 372 Riverdale Ave |
| Address: | 372 Riverdale Avenue |
| City, ST, ZIP: | Yonkers, NY 10705 |
| Client: | Langan |
| EDR Inquiry: | 8299671.3 |
| Order Date: | 04/01/2026 |
| Certification #: | 8642-4805-89FB |
| Copyright | 1942 |

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

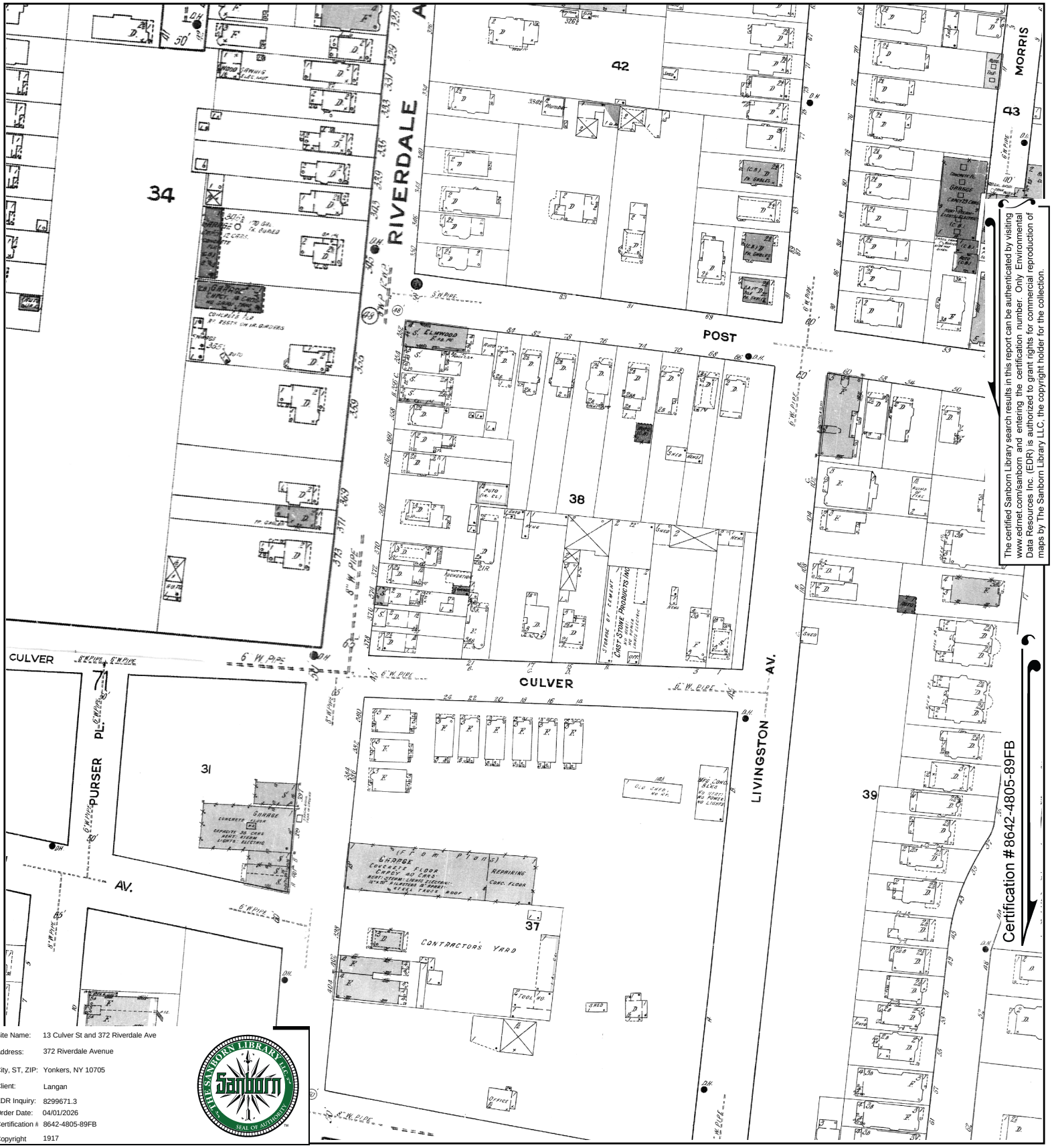
0 Feet 150 300 600






Volume 3, Sheet 7
Volume 3, Sheet 7

N

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| Site Name: | 13 Culver St and 372 Riverdale Ave |
| Address: | 372 Riverdale Avenue |
| City, ST, ZIP: | Yonkers, NY 10705 |
| Client: | Langan |
| EDR Inquiry: | 8299671.3 |
| Order Date: | 04/01/2026 |
| Certification # | 8642-4805-89FB |
| Copyright | 1917 |

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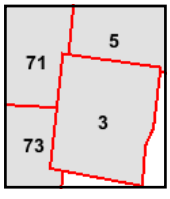
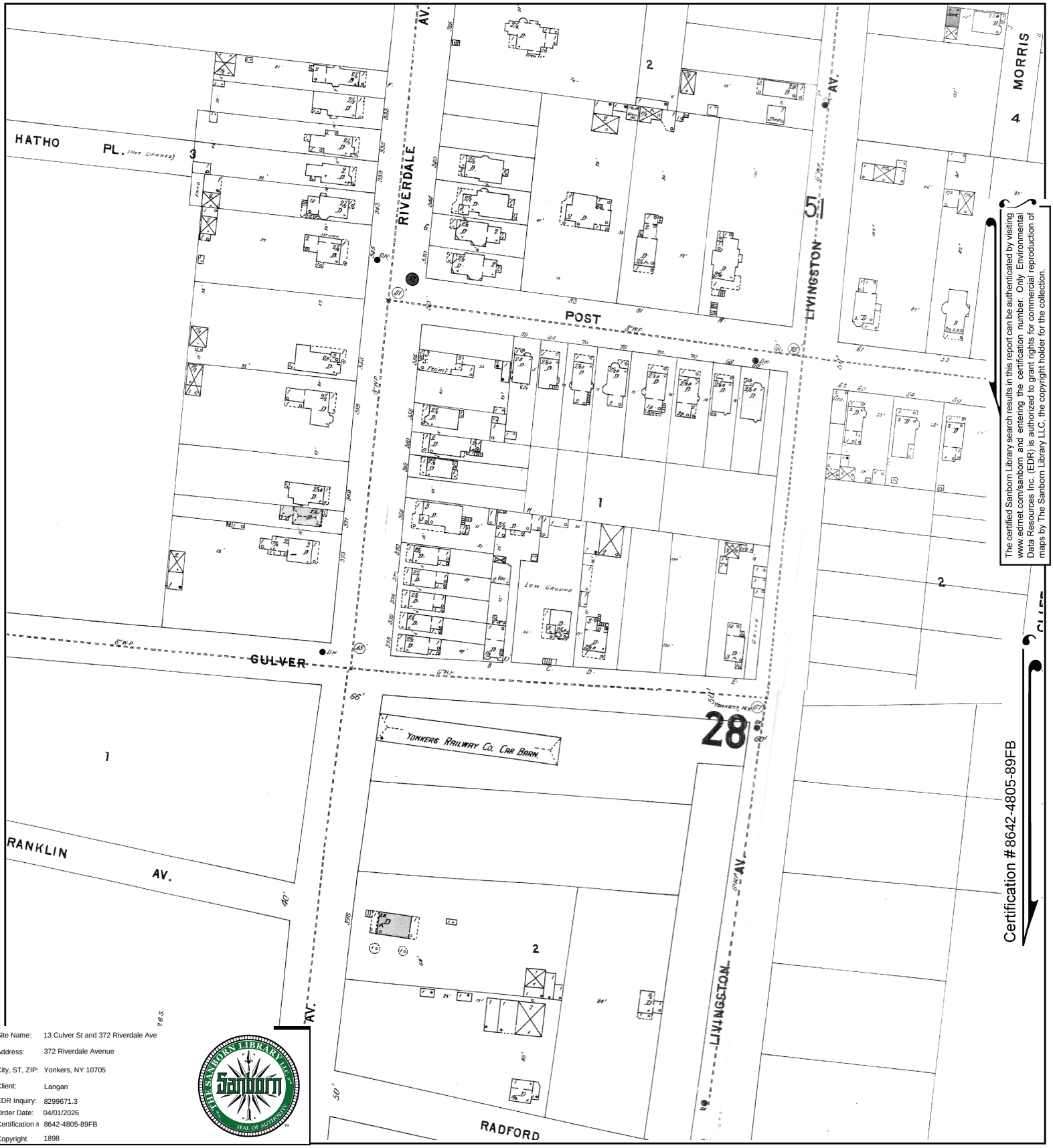



Volume 1, Sheet 5
Volume 1, Sheet 71
Volume 1, Sheet 73
Volume 1, Sheet 3

0 Feet 150 300 600

N

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| Site Name: | 13 Culver St and 372 Riverdale Ave |
| Address: | 372 Riverdale Avenue |
| City, ST, ZIP: | Yonkers, NY 10705 |
| Client: | Langan |
| EDR Inquiry: | 8299671.3 |
| Order Date: | 04/01/2026 |
| Certification #: | 8642-4805-89FB |
| Copyright | 1898 |

This Certified Sanborn Map combines the following sheets.
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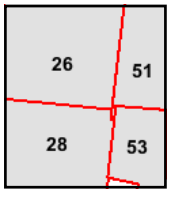


Volume 1, Sheet 51
Volume 1, Sheet 28
Volume 1, Sheet 26
Volume 1, Sheet 53

0 Feet 150 300 600

N

# Certified Sanborn® Map Report

04/01/26

**Site Name:**

13 Culver St and 372 Riverdale
372 Riverdale Avenue
Yonkers, NY 10705
EDR Inquiry # 8299671.3

**Client Name:**

Langan
368 Ninth Avenue, 8th Floor
New York, NY 10001-2727
Contact: Jennifer Armstrong

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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

## *Certified Sanborn Results:*

**Certification #** 8642-4805-89FB

**PO #** NA

**Project** 190141301

**Maps Provided:**

| | |
|---|---|
| 2004 | 1951 |
| 1991 | 1942 |
| 1989 | 1917 |
| 1978 | 1898 |
| 1973 | |
| 1971 | |
| 1957 | |
| 1956 | |

Sanborn® Library search results

Certification #: 8642-4805-89FB

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

*The Sanborn Library LLC Since 1866™*

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## *Sanborn Sheet Key*

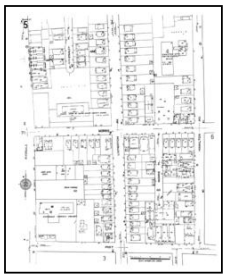
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

### 2004 Source Sheets


Volume 1, Sheet 3
2004

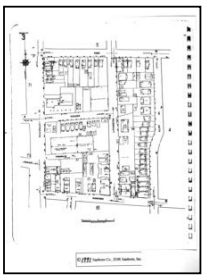

Volume 1, Sheet 71
2004

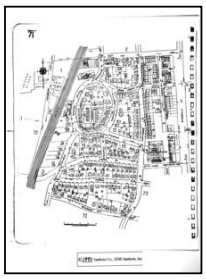

Volume 1, Sheet 73
2004


Volume 1, Sheet 5
2004

### 1991 Source Sheets


Volume 1, Sheet 73
1991

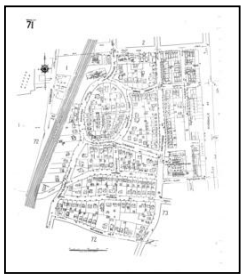

Volume 1, Sheet 3
1991


Volume 1, Sheet 71
1991

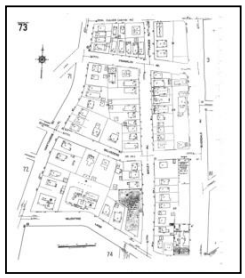

Volume 1, Sheet 5
1991

### 1989 Source Sheets


Volume 1, Sheet 5
1989


Volume 1, Sheet 71
1989


Volume 1, Sheet 3
1989


Volume 1, Sheet 73
1989

### 1978 Source Sheets


Volume 1, Sheet 71
1978


Volume 1, Sheet 3
1978


Volume 1, Sheet 73
1978


Volume 1, Sheet 5
1978

## *Sanborn Sheet Key*

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

### 1973 Source Sheets


Volume 1, Sheet 3
1973


Volume 1, Sheet 71
1973


Volume 1, Sheet 5
1973

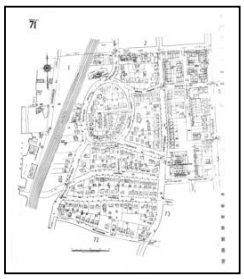

Volume 1, Sheet 73
1973

### 1971 Source Sheets


Volume 1, Sheet 73
1971


Volume 1, Sheet 5
1971

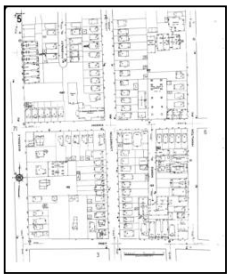

Volume 1, Sheet 3
1971


Volume 1, Sheet 71
1971

### 1957 Source Sheets


Volume 1, Sheet 71
1957


Volume 1, Sheet 3
1957


Volume 1, Sheet 5
1957


Volume 1, Sheet 73
1957

### 1956 Source Sheets


Volume 1, Sheet 73
1956


Volume 1, Sheet 3
1956


Volume 1, Sheet 71
1956


Volume 1, Sheet 5
1956

## *Sanborn Sheet Key*

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

### 1951 Source Sheets


Volume 1, Sheet 71
1951

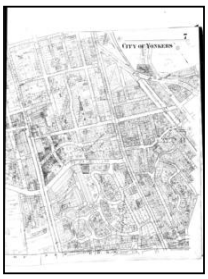

Volume 1, Sheet 3
1951


Volume 1, Sheet 73
1951

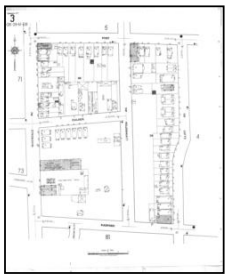

Volume 1, Sheet 5
1951

### 1942 Source Sheets

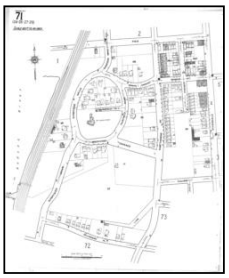

Volume 3, Sheet 7
1942


Volume 3, Sheet 7
1942

### 1917 Source Sheets

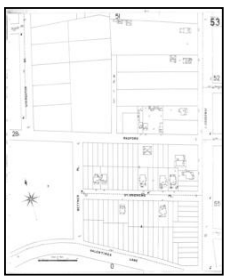

Volume 1, Sheet 3
1917


Volume 1, Sheet 73
1917

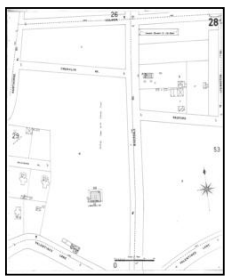

Volume 1, Sheet 71
1917


Volume 1, Sheet 5
1917

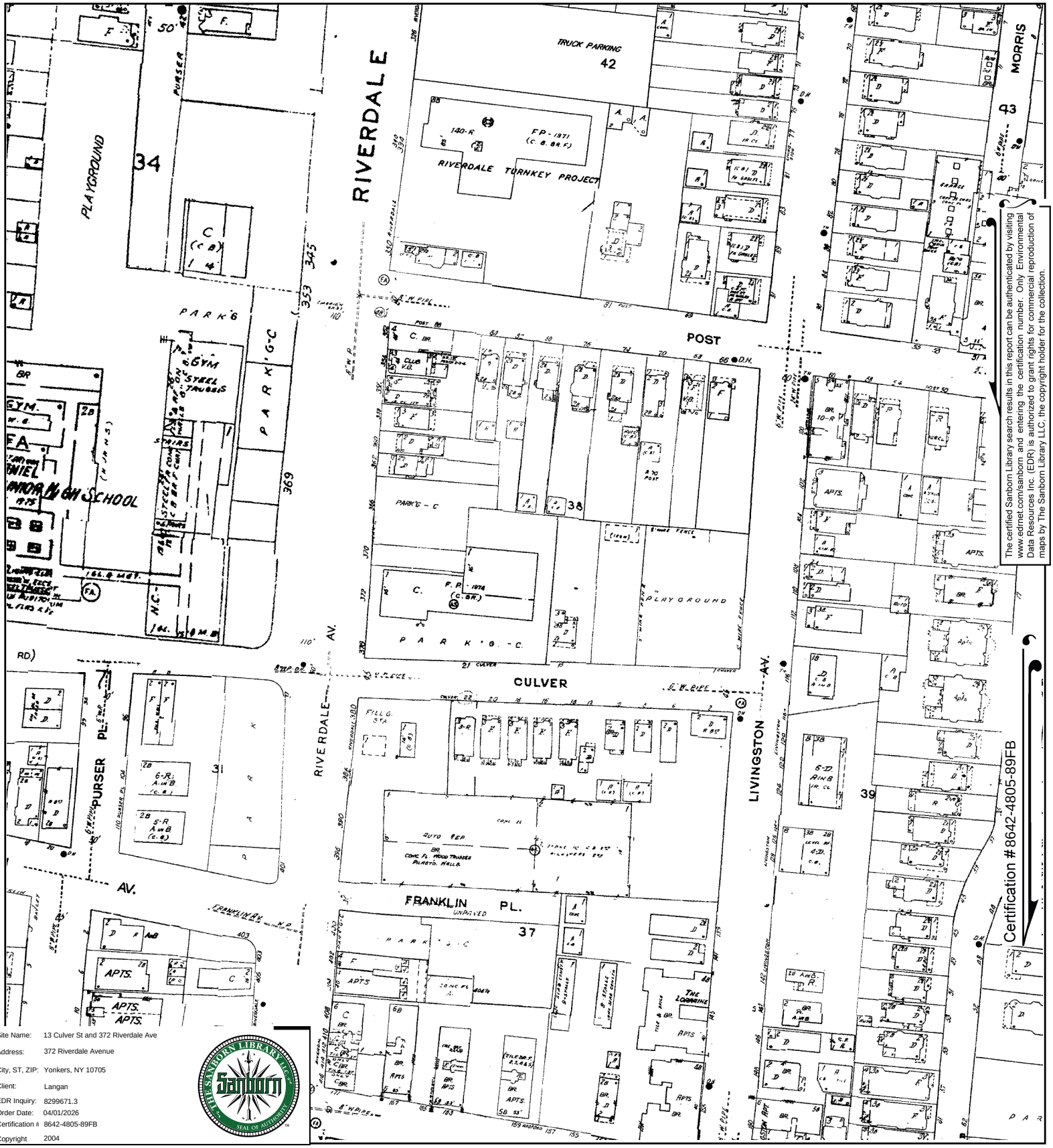
### 1898 Source Sheets


Volume 1, Sheet 53
1898


Volume 1, Sheet 26
1898


Volume 1, Sheet 28
1898


Volume 1, Sheet 51
1898

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| | |
|---|---|
| Site Name: | 13 Culver St and 372 Riverdale Ave |
| Address: | 372 Riverdale Avenue |
| City, ST, ZIP: | Yonkers, NY 10705 |
| Client: | Langan |
| EDR Inquiry: | 8299671.3 |
| Order Date: | 04/01/2026 |
| Certification #: | 8642-4805-89FB |
| Copyright | 2004 |

This Certified Sanborn Map combines the following sheets.
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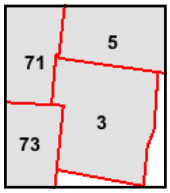


Volume 1, Sheet 5
Volume 1, Sheet 73
Volume 1, Sheet 71
Volume 1, Sheet 3

0 Feet 150 300 600

N




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|---|---|
| Site Name: | 13 Culver St and 372 Riverdale Ave |
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| City, ST, ZIP: | Yonkers, NY 10705 |
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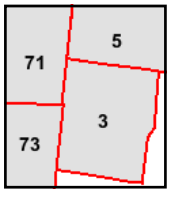


Volume 1, Sheet 5
Volume 1, Sheet 71
Volume 1, Sheet 3
Volume 1, Sheet 73

0 Feet 150 300 600

N




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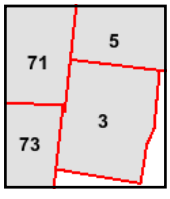
|---|---|
| Site Name: | 13 Culver St and 372 Riverdale Ave |
| Address: | 372 Riverdale Avenue |
| City, ST, ZIP: | Yonkers, NY 10705 |
| Client: | Langan |
| EDR Inquiry: | 8299671.3 |
| Order Date: | 04/01/2026 |
| Certification #: | 8642-4805-89FB |
| Copyright | 1989 |

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.






Volume 1, Sheet 73
Volume 1, Sheet 3
Volume 1, Sheet 71
Volume 1, Sheet 5

0 Feet 150 300 600

N

# Certified Sanborn® Map

1978

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|---|---|
| Site Name: | 13 Culver St and 372 Riverdale Ave |
| Address: | 372 Riverdale Avenue |
| City, ST, ZIP: | Yonkers, NY 10705 |
| Client: | Langan |
| EDR Inquiry: | 8299671.3 |
| Order Date: | 04/01/2026 |
| Certification #: | 8642-4805-89FB |
| Copyright | 1978 |

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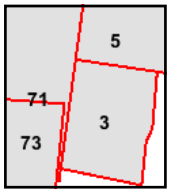


Volume 1, Sheet 5
Volume 1, Sheet 73
Volume 1, Sheet 3
Volume 1, Sheet 71

N

**13 Culver St and 372 Riverdale Ave**

372 Riverdale Avenue

Yonkers, NY 10705

Inquiry Number: 8299671.8

April 01, 2026

# The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

# EDR Aerial Photo Decade Package

04/01/26

**Site Name:**

13 Culver St and 372 Riverdale
372 Riverdale Avenue
Yonkers, NY 10705
EDR Inquiry # 8299671.8

**Client Name:**

Langan
368 Ninth Avenue, 8th Floor
New York, NY 10001-2727
Contact: Jennifer Armstrong

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***Search Results:***

| Year | Scale | Details | Source |
|---|---|---|---|
| 2024 | 1"=500' | Flight Year: 2024 | USDA/NAIP |
| 2021 | 1"=500' | Flight Year: 2021 | USDA/NAIP |
| 2017 | 1"=500' | Flight Year: 2017 | USDA/NAIP |
| 2013 | 1"=500' | Flight Year: 2013 | USDA/NAIP |
| 2010 | 1"=500' | Flight Year: 2010 | USDA/NAIP |
| 2006 | 1"=500' | Flight Year: 2006 | USDA/NAIP |
| 2002 | 1"=500' | Flight Date: March 14, 2002 | USGS |
| 1995 | 1"=500' | Acquisition Date: March 13, 1995 | USGS/DOQQ |
| 1994 | 1"=500' | Flight Date: April 04, 1994 | USDA |
| 1991 | 1"=500' | Flight Date: March 09, 1991 | NAPP |
| 1989 | 1"=500' | Flight Date: April 20, 1989 | NYDOT |
| 1984 | 1"=500' | Flight Date: March 26, 1984 | USDA |
| 1976 | 1"=500' | Flight Date: October 29, 1976 | USGS |
| 1974 | 1"=500' | Flight Date: October 24, 1974 | USDA |
| 1966 | 1"=500' | Flight Date: January 12, 1966 | USGS |
| 1962 | 1"=500' | Flight Date: January 16, 1962 | EDR Proprietary Aerial Viewpoint |
| 1954 | 1"=500' | Flight Date: February 18, 1954 | USGS |
| 1951 | 1"=500' | Flight Date: April 21, 1951 | EDR Proprietary Aerial Viewpoint |
| 1947 | 1"=500' | Flight Date: March 31, 1947 | USGS |
| 1940 | 1"=500' | Flight Date: April 02, 1940 | EDR Proprietary Aerial Viewpoint |

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INQUIRY #: 8299671.8
YEAR: 2024
= 500'
N
EDR



INQUIRY #: 8299671.8

YEAR: 2021

= 500'

N

EDR


INQUIRY #: 8299671.8
YEAR: 2017
= 500'
N
EDR


INQUIRY #: 8299671.8
YEAR: 2013
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N
EDR



INQUIRY #: 8299671.8

YEAR: 2010

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EDR



INQUIRY #: 8299671.8

YEAR: 2006

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YEAR: 2002

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YEAR: 1994

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YEAR: 1991

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YEAR: 1989
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EDR



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YEAR: 1984

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EDR



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EDR



INQUIRY #: 8299671.8

YEAR: 1962

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N

EDR



INQUIRY #: 8299671.8

YEAR: 1954

= 500'

N

EDR



INQUIRY #: 8299671.8

YEAR: 1951

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N

EDR


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YEAR: 1947
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N
EDR


INQUIRY #: 8299671.8
YEAR: 1940
= 500'
N
EDR

LIGHTBOX

# LightBox City Directory Report

**13 Culver St and 372 Riverdale Ave**

**372 Riverdale Avenue**

**Yonkers, NY 10705**

Inquiry Number: 8299671.5

April 1, 2026

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## LIGHTBOX LIVE

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https://lightbox.live/environmental/analysis/2cb3387b-7563-4ab3-af7f-0f923f1dbe67

## SECTION

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Findings ---------- page 4

**Thank you for your business.**
Please contact LightBox at 1-800-352-0050
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# EXECUTIVE SUMMARY

## DESCRIPTION

The LightBox City Directory Report is designed to assist environmental professionals in evaluating potential liabilities on select properties resulting from past activities. The report includes a search of available business directory data at approximately five-year intervals.

## SOURCES

Through agreements with major city directory publishers, including Cole Information, InfoUSA, and Bresser, as well as our own collections (Haines & Stewart), the LightBox City Directory Report offers comprehensive national coverage.
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This report includes a search of the following sources:

| Year | Source |
|---|---|
| 2024 | Cole Information |
| 2022 | Cole Information, Data Axle |
| 2017 | Cole Information, Data Axle |
| 2014 | Cole Information, Data Axle |
| 2010 | Cole Information |
| 2005 | Cole Information, Data Axle |
| 2000 | Cole Information |
| 1995 | Cole Information |
| 1992 | Cole Information |
| 1987 | Cole Publications |
| 1981 | Cole Publications |
| 1977 | Cole Publications |
| 1976 | Cole, New york Telephone Company |
| 1972 | Cole Publications |
| 1967 | New York Telephone Co, Unknown Source |
| 1965 | New york Telephone Company |
| 1963 | New York Telephone Co |
| 1962 | Price And Lee Co |
| 1961 | New York Telephone |
| 1949 | New York Telephone |
| 1940 | New York Telephone |
| 1927 | Polk Directory Co |
| 1924 | Richmond Directory Co |
| 1919 | W L Richmond |

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

**Culver St**

### 13 CULVER ST

| | | |
|---|---|---|
| 2000 | OCCUPANT UNKNOWN | Cole Information |

### 15 CULVER ST

| | | |
|---|---|---|
| 2024 | MARIBEL RIOS | Cole Information |
| 2017 | EDNA R SANCHEZ | Cole Information |
| 2014 | EDNA R SANCHEZ | Cole Information |
| 2010 | ANGELA SANCHEZ | Cole Information |
| | FLOYD FREEMAN | Cole Information |
| | ALRINE E TROTMAN | Cole Information |
| 2005 | FLOYD FREEMAN | Cole Information |
| 2000 | E DERIOS | Cole Information |
| | MARIBEL RIOS | Cole Information |
| 1995 | WALKER, LUCILLE | Cole Information |
| 1992 | MCNEILL, LILIE M | Cole Information |
| 1987 | Mrs L M McNeill | Cole Publications |
| 1981 | Mrs L M McNeil | Cole Publications |
| 1977 | MrS John H MCNell | Cole Publications |
| | MrS L M MCNell O | |
| 1972 | MRS JOHN H MCNEIL Y03 | Cole Publications |
| | MRS L M MCNEILL O | |

### 17 CULVER ST

| | | |
|---|---|---|
| 1977 | NP | Cole Publications |
| 1972 | NP | Cole Publications |

### 21 CULVER ST

| | | |
|---|---|---|
| 2010 | MILTON SANTIAGO | Cole Information |

### 23 CULVER ST

| | | |
|---|---|---|
| 1981 | | Cole Publications |

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

### Culver St (contd.)

#### 23 Culver St (contd.)

| | | |
|---|---|---|
| 1977 | NP | Cole Publications |
| 1972 | NP | Cole Publications |
| 1967 | Nelson A P | New York Telephone Co |
| | Thompson Mattie Mrs | Unknown Source |

### Riverdale Ave

#### 366 RIVERDALE AVE

| | | |
|---|---|---|
| 1972 | MRS CLARA JACKSON | Cole Publications |
| | M TUCKER O | |
| 1963 | Mahan Eileen M Mrs | New York Telephone Co |

#### 370 RIVERDALE AVE

| | | |
|---|---|---|
| 1977 | Harold J Strothers | Cole Publications |
| | JUDiOr Walker | |
| 1972 | MRS EMMA BURCH | Cole Publications |
| | MRS F SMITH | |
| | JOSEPH A WALSH Y | |

#### 372 RIVERDALE AVE

| | | |
|---|---|---|
| 2022 | RIVERDALE AUTO | Cole Information |
| 2014 | GOODYEAR AUTO SERVICE CENTER | Cole Information |
| 2010 | GOODYEAR AUTO SVC CTR | Cole Information |
| 2005 | GOODYEAR AUTO SERVICE CENTER | Cole Information |
| 2000 | GOODYEAR AUTO SERVICE CENTE | Cole Information |
| 1995 | GOODYEAR AUTO SERVICE CENTERS-YONKERS | Cole Information |
| 1992 | GOODYEAR TIRE & RUBBER CO THE-AUTO SERVICE CENTERS-YONKERS | Cole Information |
| 1981 | Goodvear Tire | Cole Publications |
| 1977 | Goodvear Hire | Cole Publications |
| 1972 | THOMAS J SCOLLAN | Cole Publications |

# FINDINGS

This section includes records sorted by street then year.

## STREETS

Culver St
Riverdale Ave
Ashton Rd
Beechwood Ter
Hawthorne Ave
Livingston Ave
Post St
Purser Pl

## CULVER ST

**2024** Cole Information

| | |
|---|---|
| 2 | ERNEST W CARTER |
| | DEBORAH DAUGHERTY |
| | LORI JOHNSON |
| | DALE E BOWRY |
| | LILIA MERCADO |
| 6 | LENORAH C POWELL |
| | JUANITA CLARKE |
| | TAYLOR DAVIS |
| 8 | MARBEL CANSECO |
| 10 | JOSE L MOYA |
| 12 | Espinal Logistics Llc |
| | ROSA STONE |
| | MILTON SANTIAGO |
| 15 | MARIBEL RIOS |
| 16 | JOHN BAKER |
| | MARCOS ARRIAGA |
| | ADONIS MEJIA |
| | IVELISSE C LOPEZ |
| | JAMES E TRUMBLY |
| | BARBARA L NUNEZ |
| | WANDA I CEDENO |
| | YOBERKI REYES |
| 18 | ARLENE RICHARDSON |
| 20 | YOAN GONZALEZ |
| | MAYRA RUANO |
| | GIOVANNI ESPINAL |
| 22 | Trendenza Llc |
| | ANDREW A HARRIOTT |

## CULVER ST

**2024** (cont.) Cole Information

| | |
|---|---|
| 22 | PAUL C SPEIGHT |
| | DORIS GARO |
| 58 | YESENIA RIVERA |
| 60 | DENISE A BERGERON |
| | MICHELE BERGERON |

## CULVER ST

**2022** Cole Information

| | |
|---|---|
| 2 | Dale E Bowry |
| 6 | Taylor Davis |
| | Apt 1 Lenorah C Powell |
| | Juanita Clarke |
| 8 | Apt 1 Marbel Canseco |
| | Apt 1 Antonio Canseco |
| 10 | Jose L Moya |
| 12 | Milton Santiago |
| 14 | Charles A Sukhraj |
| 16 | Apt 3 Yoberki Reyes |
| | Apt 3 Marcos Arriaga |
| | Apt 3 Adonis Mejia |
| | Apt 3 Wanda I Cedeno |
| 20 | Apt 3 Mayra Ruano |
| 22 | Apt 1 TRENDENZA LLC |
| | Andrew A Harriott |
| | Unit 2 Doris Garo |
| | # 3 Neda S Dukes |

# FINDINGS

## CULVER ST

**2022** (cont.) Cole Information

| | |
|---|---|
| 22 | # 3 Paul C Speight |
| 60 | Michele Bergeron |

## CULVER ST

**2017** Cole Information

| | |
|---|---|
| 2 | DALE E BOWRY |
| | ANTHONY E MERCADO |
| 6 | TAYLOR DAVIS |
| | ROY J NUGENT |
| | Apt 1 DAMIAN S POWELL |
| | DAMIAN S POWELL |
| | Apt 2 LOUIS J POWELL |
| 8 | FREEDOM SLAVE DESIGNS |
| | DAVID CANSECO |
| 12 | KADEEN BLACK |
| | MELISSA T JUSTINIANO |
| | ALYSSA RICCI |
| 14 | GRACE S PALLAPATI |
| | CHARLES A SUKHRAJ |
| 15 | EDNA R SANCHEZ |
| 16 | Apt 2 LOURDES D CRUZ |
| | BARBARA L NUNEZ |
| | Apt 3 SANDY A REYES |
| | MANUEL SOTO |
| 18 | Apt 2 ROBERT J RICHARDSON |
| 20 | ALEJANDRA LARA |
| | Apt 3 NELSON H REYES |
| 22 | Unit 2 DORIS CARO |
| | ROSALIE DEJESUS |
| 60 | DIANA BARAHONA |

## CULVER ST

**2014** Cole Information

| | |
|---|---|
| 2 | ANTHONY E MERCADO |
| | DALE E BOWRY |
| | ERNEST W CARTER |
| | JEVON STEPHENSON |
| 6 | ROY J NUGENT |
| | Apt 2 LOUIS J POWELL |
| | Unit 1 DAMIAN S POWELL |
| 8 | ANTONIO CANSECO |
| 10 | DELFINA CASTELAN |
| | JOSE L MOYA |
| 12 | Apt 1 ANASTASIA M PERSIA |
| | Unit 2F ALYSSA RICCI |
| 14 | CHARLES A SUKHRAJ |
| | Unit 2 GRACE S PALLAPATI |
| | Unit 3 MARGARET T ENCARNATION |
| | VERVE MORGAN |
| 15 | EDNA R SANCHEZ |
| 16 | MANUEL SOTO |
| | SANDY A REYES |
| | NICOLE POWELL |
| | LOURDES K DELACRUZ |
| 18 | CHRISTOPHER A WILSON |
| | ROBER RICHARDSON |
| 20 | NELSON H REYES |
| | ALEJANDRA LARA |
| 22 | NEDA S DUKES |
| 58 | GERARD F VIEUX |
| 60 | MICHELE L BERGERON |

## CULVER ST

**2010** Cole Information

| | |
|---|---|
| 2 | ANTHONY E MERCADO |
| | LILIA LASTRA |
| | DALE E BOWRY |
| 6 | LOUIS J POWELL |

# FINDINGS

## CULVER ST

**2010** (cont.) Cole Information

| | |
|---|---|
| 8 | ANTONIO CANSECO |
| 10 | JOSE L MOYA |
| 14 | CHARLES A SUKHRAJ |
| | JUDITH M VAUGHN |
| 15 | ANGELA SANCHEZ |
| | FLOYD FREEMAN |
| | ALRINE E TROTMAN |
| 16 | YOBERKI REYES |
| | LOURDES K DELACRUZ |
| 18 | ROBER RICHARDSON |
| | CHRISTOPHER A WILSON |
| 20 | CARIDAD RODRIGUEZ |
| | NELSON REYES |
| | JOHANNA ACEVEDO |
| | JORGE G FLORES |
| | PROSPERO A RAMIREZ |
| | MARIA MERCEDES |
| 21 | MILTON SANTIAGO |
| 58 | GERARD F VIEUX |
| 60 | MICHELE L BERGERON |

## CULVER ST

**2005** Cole Information

| | |
|---|---|
| 2 | DALE E BOWRY |
| 6 | COURTNEY A CLARKE |
| 8 | ANTONIO CANSECO |
| 10 | SHARI A PAYNE |
| 12 | MARY A GREENE |
| | TANISHA R CRAWFORD |
| | Apt 2 ADALBERTO LOPEZ |
| 14 | CHARLES A SUKHRAJ |
| 15 | FLOYD FREEMAN |
| 16 | Apt 3 YOBERKI REYES |
| | IVELISSE C LOPEZ |
| 18 | ROBER RICHARDSON |

## CULVER ST

**2005** (cont.) Cole Information

| | |
|---|---|
| 18 | Apt 2 CHRISTOPHER WILSON |
| 20 | CARIDAD RODRIGUEZ |
| | YADIRA FIALLOS |
| | JOSE FLORES |
| 22 | OCCUPANT UNKNOWN |
| 58 | GERARD F VIEUX |
| 60 | GRACE BRALEY |

## CULVER ST

**2000** Cole Information

| | |
|---|---|
| 6 | LOUIS POWELL |
| | Unit 1 G HARVEY |
| 8 | C HIBBERT |
| | ANTONIO CANSECO |
| 10 | SHARI PAYNE |
| 12 | OCCUPANT UNKNOWN |
| 13 | OCCUPANT UNKNOWN |
| 14 | KAMILA MOTIERAM |
| | ANA GUZMAN |
| 15 | E DERIOS |
| | MARIBEL RIOS |
| 18 | Apt 2 C WILSON |
| | ANN BANK |
| 20 | ANN DIXON |
| | L ROBINSON |
| | WILLIAM T SMITH |
| 22 | JULIA PERRY |
| 58 | GERARD VIEUX |
| 60 | CARLOS ORELLANA |
| | GRACE BRALEY |

# FINDINGS

## CULVER ST

**1995** Cole Information

| | |
|---|---|
| 2 | WISDOM, NORMAN |
| 6 | POWELL, LOUIS |
| | POWELL, LENORAH |
| 8 | CANSECO, ANTONIO |
| | MC NEIL, LISA |
| 12 | GREENE, MARYANN |
| | CRAWFORD, TANISHA |
| | CAGGIANO, THERESA |
| 14 | MOTIERAM, KAMILA |
| | TOTARAM, SHAMELA |
| | SAWH, PAMILA |
| 15 | WALKER, LUCILLE |
| 18 | BANK, ANN |
| | PEARSON, FRISON |
| 20 | SMITH, W T |
| 22 | STEWART, JUNIOR |
| | PERRY, JULIA |
| 58 | VIEUX, GERARD |
| 60 | REY, LORNA |
| | BRALEY, GRACE |

## CULVER ST

**1992** Cole Information

| | |
|---|---|
| 6 | SANTO, BEVERLY |
| 8 | CANSECO, ANTONIO |
| 10 | BRUNSON, BOBBY |
| | MEDINA, ELENA |
| 12 | GREENE, LANELL |
| | CRAWFORD, TANISHA |
| 14 | MOHUNLALL, JAGDESHWAR |
| | TOTARAM, SHAMELA |
| | SAWH, PAMILA |
| | MOHANLALL, ROGER |
| 15 | MCNEILL, LILIE M |
| 16 | POWELL, LENORAH |

## CULVER ST

**1992** (cont.) Cole Information

| | |
|---|---|
| 18 | PEARSON, FRISON |
| | BANK, ANN |
| 20 | CHRISTIAN, ANITA |
| | SMITH, W T |
| 22 | PERRY, JULIA |
| 58 | VIEUX, GERARD |
| 60 | BAGOT, HAROLD E |

## CULVER ST

**1987** Cole Publications

| | | | |
|---|---|---|---|
| 2 | M Burton | .84 | 968-5948 |
| 6 | David Culbreath | .84 | 963-4013 |
| | Dermot Stewart | .84 | 969-6312 |
| 8 | Antonio Canseco | .84 | 476-9102 |
| | Paulette Watson | ¤ | 968-1557 |
| 10 | Arimentha Lewis | .81 | 476-8497 |
| | William R Lewis | .76 | 968-7579 |
| 12 | J D Alexander | ¤ | 378-1714 |
| | Rafael Arce | ¤ | 965-3234 |
| | Mrs L Reynolds | .70 | 969-3101 |
| | Carole Thomas | .85 | 476-3914 |
| 14 | S Baishakhu | .84 | 968-7618 |
| | Sawa Mohunlal | .83 | 968-7438 |
| | J Mohunlall | .84 | 968-3728 |
| 15 | Mrs L M McNeill | .70 | 963-3449 |
| 16 | Colleen Armstrong | .82 | 476-8758 |
| 17 | | NP | |
| 18 | Ann Bank | .68 | 423-2856 |
| | Frison Pearson | .85 | 968-5348 |
| 20 | Anita Christian | .83 | 963-9151 |
| | W T Smith | .81 | 476-4899 |
| 22 | Mrs Julia Perry | .63 | 968-8070 |
| | Warren Slayton | ¤ | 968-3199 |
| 23 | | NP | |
| 58 | Gerard Vieux | .78 | 963-1847 |
| 60 | Mrs Rose M Bagot | .61 | 963-3497 |

## CULVER ST

**1981** Cole Publications

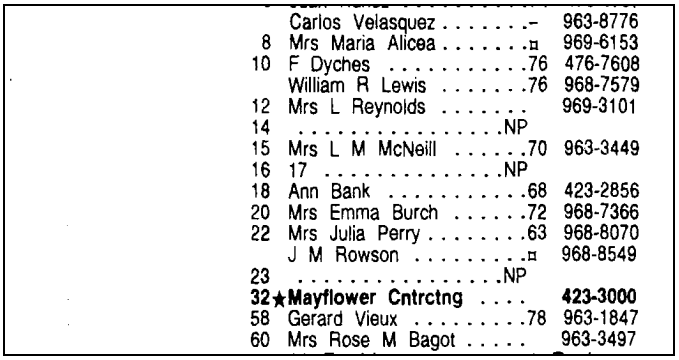
| | | | |
|---|---|---|---|
| 2 | Donna Hughes | ¤ | 476-3328 |
| 6 | Juan Nunez | .74 | 476-6797 |

# FINDINGS

## CULVER ST

**1981** (cont.)

Cole Publications

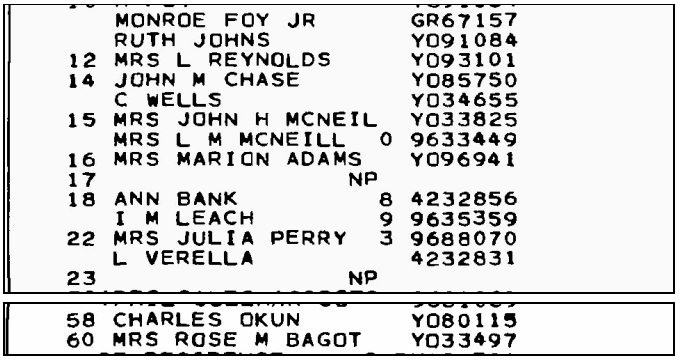


| | | |
|---|---|---|
| | Carlos Velasquez | 963-8776 |
| 8 | Mrs Maria Alicea | 969-6153 |
| 10 | F Dyches | 476-7608 |
| | William R Lewis | 968-7579 |
| 12 | Mrs L Reynolds | 969-3101 |
| 14 | | |
| 15 | Mrs L M McNeill | 963-3449 |
| 16 | 17 | |
| 18 | Ann Bank | 423-2856 |
| 20 | Mrs Emma Burch | 968-7366 |
| 22 | Mrs Julia Perry | 968-8070 |
| | J M Rowson | 968-8549 |
| 23 | | |
| 32 | ★Mayflower Cntrctng | 423-3000 |
| 58 | Gerard Vieux | 963-1847 |
| 60 | Mrs Rose M Bagot | 963-3497 |

## CULVER ST

**1972** (cont.)

Cole Publications

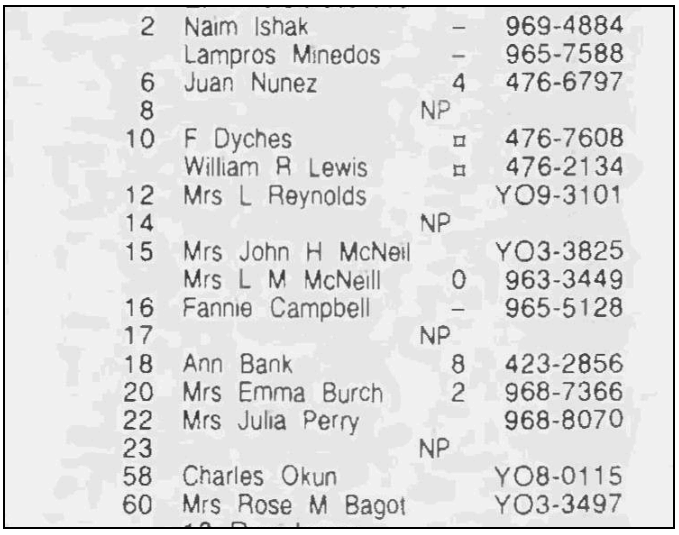


| | | | |
|---|---|---|---|
| | MONROE FOY JR | | GR67157 |
| | RUTH JOHNS | | YO91084 |
| 12 | MRS L REYNOLDS | | YO93101 |
| 14 | JOHN M CHASE | | YO85750 |
| | C WELLS | | YO34655 |
| 15 | MRS JOHN H MCNEIL | | YO33825 |
| | MRS L M MCNEILL | 0 | 9633449 |
| 16 | MRS MARION ADAMS | | YO96941 |
| 17 | | NP | |
| 18 | ANN BANK | 8 | 4232856 |
| | I M LEACH | 9 | 9635359 |
| 22 | MRS JULIA PERRY | 3 | 9688070 |
| | L VERELLA | | 4232831 |
| 23 | | NP | |
| 58 | CHARLES OKUN | | YO80115 |
| 60 | MRS ROSE M BAGOT | | YO33497 |

## CULVER ST

**1977**

Cole Publications

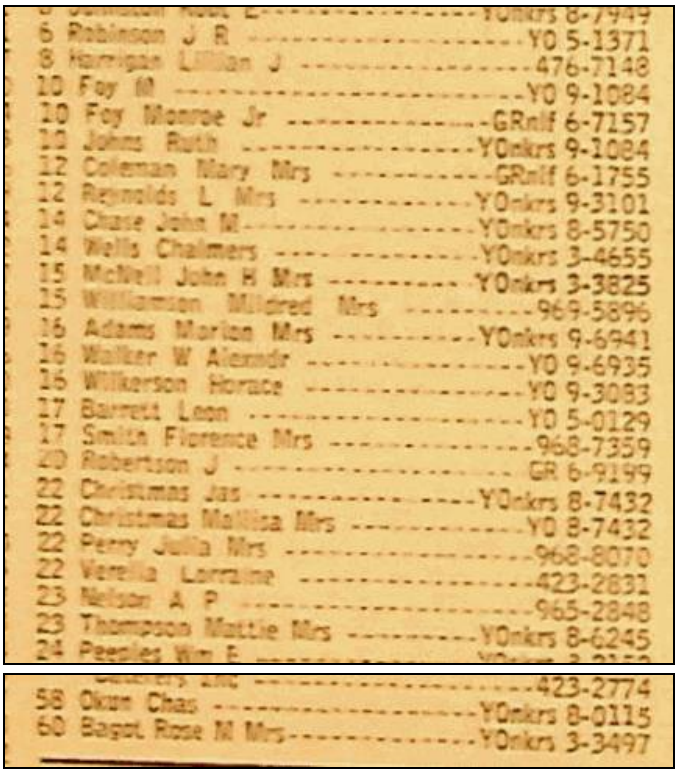


| | | | |
|---|---|---|---|
| 2 | Naim Ishak | – | 969-4884 |
| | Lampros Minedos | – | 965-7588 |
| 6 | Juan Nunez | 4 | 476-6797 |
| 8 | | NP | |
| 10 | F Dyches | ¤ | 476-7608 |
| | William R Lewis | ¤ | 476-2134 |
| 12 | Mrs L Reynolds | | YO9-3101 |
| 14 | | NP | |
| 15 | Mrs John H McNeil | | YO3-3825 |
| | Mrs L M McNeill | 0 | 963-3449 |
| 16 | Fannie Campbell | – | 965-5128 |
| 17 | | NP | |
| 18 | Ann Bank | 8 | 423-2856 |
| 20 | Mrs Emma Burch | 2 | 968-7366 |
| 22 | Mrs Julia Perry | | 968-8070 |
| 23 | | NP | |
| 58 | Charles Okun | | YO8-0115 |
| 60 | Mrs Rose M Bagot | | YO3-3497 |

## CULVER ST

**1967**

New York Telephone Co

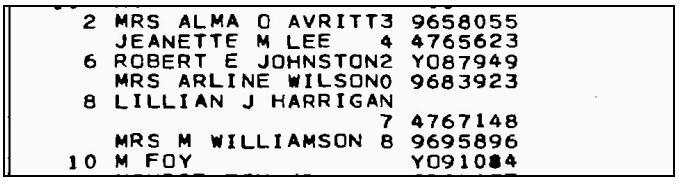


| | | |
|---|---|---|
| 6 | Robinson J R | YO 5-1371 |
| 8 | Harrigan Lillian J | 476-7148 |
| 10 | Foy M | YO 9-1084 |
| 10 | Foy Monroe Jr | GRnlf 6-7157 |
| 10 | Johns Ruth | YOnkrs 9-1084 |
| 12 | Coleman Mary Mrs | GRnlf 6-1755 |
| 12 | Reynolds L Mrs | YOnkrs 9-3101 |
| 14 | Chase John M | YOnkrs 8-5750 |
| 14 | Wells Chalmers | YOnkrs 3-4655 |
| 15 | McNeil John H Mrs | YOnkrs 3-3825 |
| 15 | Williamson Mildred Mrs | 969-5896 |
| 16 | Adams Marion Mrs | YOnkrs 9-6941 |
| 16 | Walker W Alexndr | YO 9-6935 |
| 16 | Wilkerson Horace | YO 9-3083 |
| 17 | Barrett Leon | YO 5-0129 |
| 17 | Smith Florence Mrs | 968-7359 |
| 20 | Robertson J | GR 6-9199 |
| 22 | Christmas Jas | YOnkrs 8-7432 |
| 22 | Christmas Mattisa Mrs | YO 8-7432 |
| 22 | Perry Julia Mrs | 968-8070 |
| 22 | Verella Lorraine | 423-2831 |
| 23 | Nelson A P | 965-2848 |
| 23 | Thompson Mattie Mrs | YOnkrs 8-6245 |
| 24 | Peeples Wm F | |
| | | 423-2774 |
| 58 | Okun Chas | YOnkrs 8-0115 |
| 60 | Bagot Rose M Mrs | YOnkrs 3-3497 |

## CULVER ST

**1972**

Cole Publications



| | | | |
|---|---|---|---|
| 2 | MRS ALMA O AVRITT | 3 | 9658055 |
| | JEANETTE M LEE | 4 | 4765623 |
| 6 | ROBERT E JOHNSTON | 2 | YO87949 |
| | MRS ARLINE WILSON | 0 | 9683923 |
| 8 | LILLIAN J HARRIGAN | | |
| | | 7 | 4767148 |
| | MRS M WILLIAMSON | 8 | 9695896 |
| 10 | M FOY | | YO9108 4 |

# FINDINGS

## CULVER ST

**1967** Unknown Source

23 Thompson Mattie Mrs

## CULVER ST

**1963** New York Telephone Co




## CULVER ST

**1927** Polk Directory Co

26 Riverdale
Purser pl

# FINDINGS

## RIVERDALE AVE

**2024** Cole Information

| | |
|---|---|
| 334 | FABIO CAERABLLO |
| | SEGUNDA A HOLGUIN |
| | GILBERTO NUNEZ |
| | ELSIE CONCEPCION |
| | LEONARDO R DIAZ |
| | NAN D GONZALES |
| | MANUEL SOTO |
| | OLGA POLANCO |
| | ISRAEL ROJAS |
| | ALBERTO M SILVA |
| | DELFIM A HEUSLER |
| | MICHAEL F MILANO |
| | CARMEN DELFI |
| | MILAGROS DIAZ |
| | LOUVENIA DRAKEFORD |
| | DAVID MONTTY |
| | THOMAS O SEGUIN |
| | MARY L CALLOWAY |
| | CARMEN CORREA |
| | JOHN S LIVOLSI |
| | MARIA A PEREZ |
| | MEDARDO MORAN |
| | FANNIE WINN |
| | JAMES STRATFORD |
| | JONG CHOI |
| | PERRY L FOY |
| | ZADELL NORTON |
| | VICTORIA ZELAYA |
| | WILLIAM J KESSAY |
| | ROMULO RODRIGUEZ |
| | CARMEN FRANCO |
| | ITALO PLAZA |
| | ENESTORA M ROSARIO |
| | IZARIA IVANHOFF |
| | JACKELENA HARPER |
| | TOMASINA PENA |
| | ARWA HOURANI |
| | JOSEPH L ORAMAS |

## RIVERDALE AVE

**2024** (cont.) Cole Information

| | |
|---|---|
| 334 | FRANK BAZEMORE |
| | JOSE M ORTIZ |
| | KIM COHEN |
| | CARMEN E VASQUEZ |
| | JULIA COLLADO |
| | LINA C RAMOS |
| | ALTAGRACIA FLORES |
| | PRAGEDA CORDERO |
| | EMMA J TAYLOR |
| | ANNA DEJESUS |
| | FABIO CAERABLLO |
| | JACKELENA HARPER |
| | YARITZA ECHEVRRIA |
| | WALTER J HUMBERT |
| | SUDESH ANAND |
| | KATY CAMPBELL |
| | MARIA M LOPEZ |
| | TIMOTHY E MURRAY |
| | ALFREDO RODRIGUEZ |
| | MARIA C CORDERO |
| | CARMENCITA Y DULA |
| | JOHN E LOEB |
| | RODRIGO M MORALES |
| | MANUEL S ALFONSO |
| | MERCEDES FIGUEREO |
| | CARMEN M ROSA |
| | CHEVELLE TUTHILL |
| | FRANKLIN R ESTEVEZ |
| | ANTONIA A LUNA |
| | MARIELLE CHARLES |
| | ESMERALDA S SALAZAR |
| | NORRIS D DAWSON |
| | IDA B SCOTT |
| | ADRIANN A VALENCIA |
| | PATRICIA DORE |
| | ANA M RODRIGUEZ |
| | DANIEL FIGUEROA |
| | MARTIN LEVINE |

# FINDINGS

## RIVERDALE AVE

**2024** (cont.) Cole Information

| | |
|---|---|
| 334 | JEAN E MASON |
| | AMERICO HERNANDEZ |
| | DIONICIA D DE VASQUEZ |
| | JONG CHOI |
| | BEATRIZ G CHIRIBOGA |
| | GLORIA J CERCADO |
| | ALEX M LOPEZ |
| | JUNIOR A STUBBS |
| | ETINENCIA COLON |
| | CHERYL ELIN-SMITH |
| | JESUSITA FRANCISCO |
| | MARIA GUTIERREZ |
| | ELLEN C MCKAY |
| | ERIC ACHEAMPONG |
| | JOSEPH GOVARGES |
| | CECILIA VIOLA |
| | Rodolfo Fito |
| | ANGEL QUINONES |
| | MELANIA S RODRIGUEZ |
| | MARINA E VALENCIA |
| | TOMAS LOPEZ |
| | MICHAEL LIM |
| | CECILIA VIOLA |
| | EBELKIS BUENO |
| 350 | LISBETH REALES |
| | DANYA V WILBUR |
| | STEPHEN O ESELE |
| | ERNESTINE P LEE |
| 352 | Riverdale Food Center |
| 356 | ISMAEL GARCIA |
| | SIXTO U ACOSTA |
| 358 | NERIDA CABAN |
| | ELSIE CARABALLO |
| | SANTIAGO GIOVANNI |
| 360 | DANIELA MATIAS-DILONE |
| | THOMAS J RYZNER |
| | RAMON H OLIVERO |
| | TEODORA K ASTAHOVA |

## RIVERDALE AVE

**2024** (cont.) Cole Information

| | |
|---|---|
| 360 | VALENTINE C METCHIE |
| | RADDFD HERNANDEZ |
| | MARION P POWERS |
| 362 | BRIAN HUGHES |
| 380 | Yonkers Trading Llc |
| | Riverdale Taxi Ltd |
| 390 | Devonshire Lane Service Inc |
| | Devonshire 2010 Inc |
| | 380 Riverdale Avenue Corp |
| | RAMON MIGUEL |

## RIVERDALE AVE

**2022** Cole Information

| | |
|---|---|
| 334 | Apt 2 |
| | Apt 2P Jesusita Francisco |
| | Apt 5P Maryjane J Hoover |
| | Apt 5I Fannie Winn |
| | Apt 6O Mary L Calloway |
| | Apt 2H Ana M Rodriguez |
| | Apt 2N Medardo Moran |
| | Apt 6I Ellen C McKay |
| | Apt 2B Ramona Almonte |
| | Apt 4I Alex M Lopez |
| | Apt 3C Marielle Charles |
| | Apt 5D Alberto M Silva |
| | Apt 4S Frank B Beltran |
| | Apt 4K Jong Choi |
| | Apt 6M Maria Gutierrez |
| | Apt 1I Sun Lee |
| | Apt 2C William J Kessay |
| | Apt 7N Sudesh Anand |
| | Apt 3A Asalia Vasquez |
| | Apt 2I Enestora M Rosario |
| | Apt 6E Americo Hernandez |
| | Apt 4P John S Livolsi |

# FINDINGS

## RIVERDALE AVE

**2022** (cont.) Cole Information

334 Apt 1G Adriann A Pintos Valencia
Apt 7F Dionisia A Nova-Tauares
Apt 7K Darryl Overby
Apt 1K Maria M Falu
Apt 1C Italo Plaza
Apt 5B Ebelkis Bueno
Apt 1B Minnie M Harper
Apt 7P Andrea Santiago
Apt 4B Norris Dawson
Apt 5R Timothy E Murray
Apt 6D Ramona T Burgos
Apt 3D Kim Cohen
Apt 4N Rafael A Sotomayor
Apt 6K Nan Gonzales
Apt 4B Anna Dejesus
Apt 1P Yaritza Echevrria
Apt 3H Angel Quinones
Apt 6D John E Loeb
Apt 2J James Stratford
Apt 5H Patricia Dore
Apt 5T Alicia Fortunato
Apt 2O Mercedes Figuereo
Apt 5E Pedro R Melendez
Apt 3F Julia Collado
Apt 7D Etinencia Colon
Apt 2K Brodie Petten
Apt 6B Dionicia D de Vasquez
Apt 7P Izaria Ivanhoff
Apt 5I Jerry Davis
Apt 7B Esmeralda S Salazar
Apt 3P Leonardo R Diaz
Apt 1J Prageda Cordero
Apt 1D Tomas Lopez
Apt 4A Maria M Caba
Apt 7O Elsie Concepcion
Apt 7M Joseph Govarges
Apt 3A Carmen Vasquez
Apt 5O Joseph L Oramas

## RIVERDALE AVE

**2022** (cont.) Cole Information

334 Apt 6A Franklin R Estevez
Apt 6D Jose Devora
Apt 7L Israel Rojas
Apt 6C Alfredo Rodriguez
Apt 6N Frank Bazemore
Apt 6F Gilberto Nunez
Apt 5A Milagros Diaz
Apt 5F Arwa Hourani
Apt 4R Romulo Rodriguez
Apt 3B Martin Levine
Apt 5E Emma J Taylor
Apt 1L David Montty
Apt 1D Carmen Delfi
Apt 4T Melania Rodriguez
Apt 1O Ernest Carden
Apt 2G Carmen M Rosa
Apt 7I Ida Scott
Apt 4O Junior A Stubbs
Apt 6H Jean E Mason
Apt 4C Lina C Ramos
Apt 6P Eric Acheampong
Apt 5S Zadell Norton
Apt 3Q Carmen Correa
Apt 2F Victoria Zelaya
Apt 5L Gloria J Cercado
Apt 5Q Luz Quezada
Apt 4D Manuel Soto
Apt 6Q Segunda A Holguin
Apt 6R Eudosia Baez
Apt 7C Beatriz G Chiriboga
Apt 2K Antonia A Luna
Apt 6F Tomasina Pena
Apt 1H Maria M Lopez
Apt 3O Marvelia Negron
Apt 7D Marina E Valencia
Apt 2A Louvenia Drakeford
Apt 1D Olga Polanco
Apt 7R Michael Lim

# FINDINGS

## RIVERDALE AVE

**2022** (cont.) Cole Information

| | |
|---|---|
| 334 | Apt 1H Walter J Humbert |
| | Apt 3B Manuel S Alfonso |
| | Apt 7A Maria C Cordero |
| | Apt 7R Ismenia R Padilla |
| | Apt 7R Cecilia Viola |
| 350 | Apt 2 Ernestine P Lee |
| | Apt 1B Danya Wilbur |
| | Apt 3 Stephen Esele |
| 352 | RIVERDALE FOOD CENTER |
| 358 | Apt 1 Elsie Caraballo |
| | Apt 2 Nerida Caban |
| | Apt 2 Santiago Giovanni |
| 360 | Apt 2 Daniela Matias-Dilone |
| | Apt 2 Raddfd Hernandez |
| | Apt 1 Thomas J Ryzner |
| 362 | Tynetta Hughes |
| 372 | RIVERDALE AUTO |
| 380 | CONOCO |
| | CITGO |
| 390 | DEVONSHIRE LANE SERVICE INC |
| | TLC TRANSPORTATION CORPORATION OF WESTCHESTER |
| | TLC TRANSPORTATION |

## RIVERDALE AVE

**2022** Data Axle

| | |
|---|---|
| 334 | JOHN E FLYNN MANOR-MUNI |
| | USPS BLUE COLLECTION BOX |

## RIVERDALE AVE

**2017** Cole Information

| | |
|---|---|
| 334 | Apt 7H CARABALLO CAR SERVICE CORP |
| | Apt 6P ERIC ACHEAMPONG |

## RIVERDALE AVE

**2017** (cont.) Cole Information

| | |
|---|---|
| 334 | Apt 2B JOSE A ALVAREZ |
| | Apt 7N MANU ANAND |
| | Apt 4N LORRAINE ANDERSON |
| | Apt 7T HUGH F BEATTIE |
| | Apt 4S BF BELTRAN |
| | Apt 5K FRANK BELTRAN |
| | Apt 5B EBELKIS BUENO |
| | Apt 4A MARIA M CABA |
| | Apt 2T PABLO CABRERA |
| | KATY CAMPBELL |
| | Apt 7H FABIO CARABALLO |
| | Apt 3C MARIDLLE CHARLES |
| | Apt 7C BEATRIZ G CHIRIBOGA |
| | Apt 3D EVIE B COHEN |
| | Apt 7D ETINENCIA COLON |
| | Apt 7O ELSIE CONCEPCION |
| | Apt 2L MERCEDES CONCEPCION |
| | Apt 1J PRAGEDA CORDERO |
| | Apt 3T JERRY DAVIS |
| | Apt 4B NORRIS DAWSON |
| | MICHELLE DEJESUS |
| | Apt 2I ENESTORA M DELROSARIO |
| | Apt 3P LEONARDO R DIAZ |
| | Apt 2A LOUVENIA DRAKEFORD |
| | Apt 1A DANIEL FIGUEROA |
| | Apt 6H MISTER FITO |
| | ALICIA FORTUNATO |
| | Apt 2P JESUSITA FRANCISCO |
| | Apt 1Q ROBERT GALINDO |
| | Apt 3R SAMUEL GAYNOR |
| | Apt 6K NAN GONZALES |
| | Apt 7M JOSEPH GOVARGES |
| | Apt 5C COSMO GUARRIELLO |
| | Apt 1B JACKELENA HARPER |
| | Apt 6Q SEGUNDA A HOLGUIN |
| | Apt 5P MARYJANE J HOOVER |
| | Apt 2J STRAFORD IRVING |
| | Apt 6J DANIEL KING |

# FINDINGS

## RIVERDALE AVE

**2017** (cont.) Cole Information

| | |
|---|---|
| 334 | PATRICK LINEN |
| | Apt 4P JOHN S LIVOLSI |
| | Apt 4I ALEX M LOPEZ |
| | LIVINIA A LOPEZ |
| | Apt 1D TOMAS LOPEZ |
| | Apt 2K JUANA A LUNA |
| | Apt 6O LYNN B MARTIN |
| | Apt 4L MARIANO MARTINEZ |
| | Apt 6I ELLEN C MCKAY |
| | Apt 5E PEDRO R MELENDEZ |
| | Apt 5F DANIEL B MENENDEZ |
| | Apt 7J MICHAEL F MILANO |
| | FRANCISCA MORALES |
| | Apt 7A MICHAEL MORALES |
| | Apt 2N MEDARDO MORAN |
| | CESAR MUNOZCASTELLANOS |
| | TIMOTHY MURRAY |
| | Apt 1T CONCHITA D NG |
| | Apt 6S GILBERTO NUNEZ |
| | Apt 7K DARRYL OVERBY |
| | Apt 4R JESUS PAREDES |
| | Apt 6T DORA PAULINO |
| | Apt 2Q LILLIE M PEGUES |
| | Apt 6F TOMASINA PENA |
| | Apt 7E ENA A PINEDO |
| | W PINTOS |
| | Apt 5Q LUZ P QUEZADA |
| | ANGEL QUINONES |
| | Apt 3N ELBERT REED |
| | Apt 3I PAULINE P ROCCO |
| | Apt 4T ENRIQUE RODRIGUEZ |
| | Apt 5I LUIS SANCHEZ |
| | Apt 3Q CARMEN SERRANO |
| | Apt 7I MANUEL SOTO |
| | Apt 3L JUNIOR STUBBS |
| | JIMMY TARVER |
| | EULOGI G TRUELSEN |
| | Apt 5H CHEVELLE TUTHILL |

## RIVERDALE AVE

**2017** (cont.) Cole Information

| | |
|---|---|
| 334 | ROBERTO A VERAS |
| | Apt 7R CECILIA VIOLA |
| 350 | Apt 2 PIERROT BEAUBRUN |
| | Apt 1A STEPHEN O ESELE |
| 352 | YONKERS SERVICE MACHINE CORP |
| 354 | RAYMOND ORTIZ |
| 356 | Apt 1 SIXTO U ACOSTA |
| 358 | BSMT JOSEFA QUILES |
| 360 | KATRINA HARRIS |
| 380 | RIVERDALE CONVENIENCE CORP |
| 390 | DEVONSHIRE LANE SERVICE INC |
| | 380 RIVERDALE AVENUE CORP |

## RIVERDALE AVE

**2017** Data Axle

| | |
|---|---|
| 345 | YONKERS AGING OFFICE |

## RIVERDALE AVE

**2014** Cole Information

| | |
|---|---|
| 334 | Apt 1Q ROBERT GALINDO |
| | Apt 6H MISTER FITO |
| | NORA GOMES-CALEB |
| | NAN GONZALES |
| | Apt 5C COSMO GUARRIELLO |
| | Apt 5B HAZEL L GILL |
| | Apt 1A DANIEL FIGUEROA |
| | CARMEN FRANCO |
| | Apt 2P JESUSITA FRANCISCO |
| | ALICIA FORTUNATO |
| | Apt 3A ALTAGRACIA FLORES |
| | JUNIOR ETUBBS |
| | Apt 1B JACKELENA HARPER |
| | Apt 6Q SEGUNDA A HOLGUIN |

# FINDINGS

## RIVERDALE AVE

**2014** (cont.) Cole Information

| | |
|---|---|
| 334 | Apt 5P MARYJANE HOOVER |
| | Apt 7P J HACKETT |
| | STRAFORD IRVING |
| | MOISES ITURBIDES |
| | Apt 3R ATHANASIOS KATSOURANIS |
| | Apt 6J DANIEL KING |
| | Unit 1 RAYMOND JUICO |
| | Apt 5T JUNE N LAFORTE |
| | ESTRELLA LAZO |
| | Apt 1D EDWARDO F LIMA |
| | PATRICK LINEN |
| | Apt 1H ALEX M LOPEZ |
| | Apt 4I MARIA M LOPEZ |
| | Apt 6P CATHERINE C LOVALLO |
| | MANU ANAND |
| | LORRAINE ANDERSON |
| | FRANK BAZEMORE |
| | FRANK BELTRAN |
| | Apt 1R STEVEN BROCKMAN |
| | MARIA M CABA |
| | Apt 2T PABLO CABRERA |
| | NORA CALEB |
| | Apt 6K LUIS CECERES |
| | MARIDLLE CHARLES |
| | Apt 7C BEATRIZ G CHIRIBOGA |
| | Apt 3D EVIE B COHEN |
| | JULIA COLLADO |
| | Apt 7D ETINENCIA COLON |
| | Apt 2L MERCEDES CONCEPCION |
| | Apt 1J PRAGEDA CORDERO |
| | NORRIS DAWSON |
| | MARIA DELGADO |
| | LOUVENIA DRAKEFORD |
| | YARITZA ECHEVRRIA |
| | Apt 5I FANNIE WINN |
| | Apt 2D MANUEL VASQUEZ |
| | B MARTINS |
| | Apt 2R JULIANA MATEO |

## RIVERDALE AVE

**2014** (cont.) Cole Information

| | |
|---|---|
| 334 | Apt 6I ELLEN C MCKAY |
| | NATIVIDAD N MELENDEZ |
| | Apt 7J MICHAEL F MILANO |
| | RAFAEL MONTENEGRO |
| | Apt 7A DIANA MORALES |
| | MEDARDO MORAN |
| | LILLIE M PEGUES |
| | Apt 6F TOMASINA PENA |
| | L PETERSON |
| | ENA A PINEDO |
| | CARMINE L POLITANO |
| | MARIA OFARRILL |
| | DARRYL OVERBY |
| | ALVIN E NEEDAM |
| | GILBERTO NUNEZ |
| | MARIANO MARTINEZ |
| | Apt 7B ESMERALDA S SALAZAR |
| | Unit 334 LAWRENCE A SIEGEL |
| | MANUEL SOTO |
| | JUNIOR STUBBS |
| | CESAR RAMIREZ |
| | ELBERT REED |
| | Apt 3I PALMA P ROCCO |
| | Apt 5L JOSE R ROMAN |
| | DORA PAULINO |
| | Apt 2F VICTORIA ZELAYA |
| | Apt 5H MARGARET D TUTHILL |
| | Apt 4B MARY M WILSON |
| 350 | Apt 3 LISBETH M REALES |
| | Apt 2 ERNESTINE P LEE |
| | Apt 1A STEPHEN O ESELE |
| 352 | RIVERDALE FOOD CENTER |
| 354 | DEORANIE BALKISHUN |
| 356 | TERENCE M OGRADY ANTIQUES |
| | MYRON GERSH |
| | M O TERENCE |
| 358 | JOSEFA QUILES |
| | Apt 2 NERIDA CABAN |

# FINDINGS

## RIVERDALE AVE

**2014** (cont.) Cole Information

| | |
|---|---|
| 358 | LUIS CORREA |
| | Apt 1 ELSIE CARABALLO |
| 360 | DONALD E MCAULIFFE |
| | MARION P POWERS |
| 372 | GOODYEAR AUTO SERVICE CENTER |
| 380 | CITGO |
| | LOCKSMITH SERVICE |
| | PAYLESS YONKERS LOCKSMITH |
| | RIVERDALE PLUMBING & HEATING |
| | YONKERS LOCK SOLUTIONS |
| 390 | TLC TRANSPORTATION CORPORATION OF WE |
| | DEVONSHIRE 2010 INC |
| | DEVONSHIRE 2010 INCORPORATED |

## RIVERDALE AVE

**2014** Data Axle

| | |
|---|---|
| 334 | MUNICIPAL HOUSING AUTHORITY |
| 377 | RIVERDALE AUTO SVC INC |

## RIVERDALE AVE

**2010** Cole Information

| | |
|---|---|
| 334 | MUNICIPAL HOUSING AUTHORITY |
| | JOHN T MAGAZINO |
| | FRANK BAZEMORE |
| | SUSANA MARTINEZ |
| | MARIANO MARTINEZ |
| | JULIA COLLADO |
| | ELSIE CONCEPCION |
| | Apt 2L MERCEDES CONCEPCION |
| | PRAGEDA CORDERO |
| | Apt 7P J HACKETT |
| | Apt 5K MINNIE M HARPER |
| | Apt 1T EUGENE Q MARCUS |

## RIVERDALE AVE

**2010** (cont.) Cole Information

| | |
|---|---|
| 334 | Apt 7H FABIO CARABALLO |
| | MARIA M CABA |
| | L CACERES |
| | ELSA CARELA |
| | Apt 6B L O CARRINGTON |
| | DAVID A BAEZ |
| | JAMES MCDANIEL |
| | HUMBERTO SEVERINO |
| | Apt 6I ELLEN C MCKAY |
| | JAMES STRATFORD |
| | SUN Y SHIM |
| | Apt 1F HAYDEE M SOTO |
| | GIRLEY SMITH |
| | MARIA OFARRILL |
| | PAULA MELENDEZ |
| | LORRAINE MESSER |
| | RAFAEL MONTENEGRO |
| | ANGEL L MORALES |
| | F MORRIS |
| | EMMANUEL CHERY |
| | Apt 4K JONG S CHOI |
| | Apt 1C MARIA C OLIVERA |
| | Apt 1D LULA LIMA |
| | MARINA JEREZ |
| | MARIA M LOPEZ |
| | Apt 5T JUNE N LAFORTE |
| | JOHN CULLEN |
| | LUZ SANTAELLA |
| | Apt 7D MARINA E VALENCIA |
| | MANUEL VASQUEZ |
| | CECILIA VIOLA |
| | C LOVALLO |
| | ZOILA QUEZADA |
| | LUZ QUEZADA |
| | MANU ANAND |
| | LORRAINE ANDERSON |
| | Apt 3I PAULINE ROCCO |
| | Apt 4T MELANIA D RODRIGUEZ |

# FINDINGS

## RIVERDALE AVE

**2010** (cont.) Cole Information

334 ANGELICA ROJAS
Apt 5L JOSE R ROMAN
ELBERT REED
Apt 7F ERNESTINA RIVERA
MERCEDES ALARCON
LAWRENCE WRIGHT
Apt 4B MARY M WILSON
F WINN
Apt 5Q JOAN I KILCOYNE
DANIEL KING
Apt 2J VERONICA KENNEDY
Unit 761 STEPHEN KRUCK
CLARENCE W KNAPP
ATHANASIOS KATSOURANIS
L BONDS
BIENVENIDO FIGUEROA
ALTAGRACIA FLORES
Apt 3A RAMONITA FLORES
Apt 7T HUGH F BEATTIE
Apt 6T ROBERTO A PLUMA
ENA PINEDO
GILDA PINZON
Apt 1R FLORENCE PUZIO
GRECIA A FERNANDEZ
ALFONSO FERNANDEZ
I FERNANDEZ
CARMINE L POLITANO
K PROCTOR
ROY PEART
L M PEGUES
Apt 3L MARIA A PEREZ
Apt 2H ANNA PERNOCA
JANICE PESCE
ISMENIA R PADILLA
Apt 6F DORA PAULINO
Apt 5B HAZEL L GILL
Apt 3F CELESTE S GAITO
Apt 1Q R GALINDO

## RIVERDALE AVE

**2010** (cont.) Cole Information

334 LOUIS GALLEGO
ALBERT THOMAS
VIRGINIA TORRES
GILBERTO NUNEZ
Apt 5R JAMES C IVERY
Apt 6C STEPHEN T NOVAK
Apt 5C ELEANOR E HOLT
Apt 1B JESUS M DUENAS
LOUVENIA DRAKEFORD
ROBERTO DEL-ROSARIO
LOURDES DELJESUS
VICTORIA ZELAYA
350 STEPHEN O ESELE
LISBETH M REALES
352 AMERICAN TOWING INC
RIVERDALE FOOD CTR
356 LUISA Z ACOSTA
TERENCE E OGRADY
HELEN P MULLER
358 HERMINIO MONTALVO
RODOLFO CABAN
360 DONALD E MCAULIFFE
MARION P POWERS
362 BRIAN K HUGHES
372 GOODYEAR AUTO SVC CTR
380 GETTY
390 FIRESTONE DEVONSHIRE TIRE CO
TLC TRANSPORTATION CORP
RIVERDALE TRANSMISSION PARTS
DEVONSHIRE LANE SVC INC
RIVERDALE JITNEY AIRPORT SVC
NATIONAL MOUNTAIN LINE INC

# FINDINGS

## RIVERDALE AVE

**2005** Cole Information

| | |
|---|---|
| 334 | LESTER COUSLEY |
| | PRAGEDA CORDERO |
| | JOSEPH CONLAN |
| | Apt 2L ELSIE CONCEPCION |
| | Apt 3P JOSEPH MAGLIO |
| | JOHN T MAGAZINO |
| | Apt 1A GLORIA V BAULTRIP |
| | Apt 6D AGATHA M BATISTIC |
| | C M BALLANNO |
| | ARCHIBALD BAILEY |
| | Apt 4I MARGARET CODY |
| | EUGENE MARCUS |
| | BEATRICE HARTMAN |
| | Apt 6B L O CARRINGTON |
| | GERALD CANAVAN |
| | MARIA CABA |
| | ANNIE B RITTER |
| | HUMBERTO SEVERINO |
| | Apt 3I PAULINE ROCCO |
| | BERNANDINO RODRIGUEZ |
| | ANA M RODRIGUEZ |
| | ANTHONY RODRIGUEZ |
| | ALEXANDER J RODRIGUEZ |
| | ANGELICA ROJAS |
| | Apt 5L JOSE R ROMAN |
| | JAMES MCDANIEL |
| | Apt 6I ELLEN C MCKAY |
| | JAMES B MCMANUS |
| | Apt 3J WILLIAM J MCQUILLAN |
| | Apt 7F JULIO RIVERA |
| | VIOLET JOHNSON |
| | CESAR J JUICO |
| | F MORRIS |
| | BOBBIE MOUZON |
| | PAULA MELENDEZ |
| | RAFAEL MONTENEGRO |
| | MARIA OFARRILL |
| | KEVIN G ODRISCOLL |

## RIVERDALE AVE

**2005** (cont.) Cole Information

| | |
|---|---|
| 334 | Apt 7B EDWARD V LEWIS |
| | Apt 1C MARIA C OLIVERA |
| | EMMANUEL CHERY |
| | ANGELINA CREDENDINO |
| | Apt 5T JUNE N LAFORTE |
| | EFRAIN LARA |
| | TEODORO JIMENEZ |
| | C LOVALLO |
| | ANNA B LURIE |
| | Apt 7D MARINA E VALENCIA |
| | MARIA M LOPEZ |
| | Apt 7C BETTY LORIA |
| | Unit 7 MARIE SCHLEICHER |
| | Apt 4G PETER SCHURICK |
| | LEONIDA SANCHEZ |
| | Apt 7P ANDREA SANTIAGO |
| | Apt 5D FRANCES SANTO |
| | SANTO SAPUTO |
| | Apt 4B MARY M WILSON |
| | STEPHEN KRUCK |
| | R REBELO |
| | JITINDER ANAND |
| | THOMAS G WORRELL |
| | CESAR RAMIREZ |
| | ZOILA QUEZADA |
| | Apt 2I LAURA DIONISIO |
| | Apt 2C ANNA DISILVESTRO |
| | ROBERTO DEL-ROSARIO |
| | LOURDES DELJESUS |
| | MICHAEL D DEROSA |
| | VICTORIA ZELAYA |
| | Apt 4H DAISY M DANIELS |
| | Apt 5A ELSIE V HOLLAND |
| | Apt 5C ELEANOR HOLT |
| | M NICOL |
| | JOSE HERNERDEZ |
| | Apt 4F CASIMIR F DZIADZIO |
| | Apt 1B JESUS M DUENAS |

# FINDINGS

## RIVERDALE AVE

**2005** (cont.) Cole Information

| | |
|---|---|
| 334 | Apt 3F CELESTE A GAITO |
| | Apt 1Q R GALINDO |
| | Apt 7K HELEN GARNTO |
| | EUGENIA TERUEL |
| | ALBERT THOMAS |
| | Apt 4A EDNA NEUMAN |
| | Apt 7R IDA S NOETZEL |
| | STEPHEN T NOVAK |
| | SEGUNDA HOLGUIN |
| | LAWRENCE GUTHRIE |
| | LUCILA PADILLA |
| | JOSEPH C PARETTI |
| | ESTEBAN GONZALEZ |
| | Apt 5B HAZEL L GILL |
| | L M PEGUES |
| | Apt 6F TOMASINA PENA |
| | ALFRED C PENZO |
| | Apt 7J JULIA PERCODANI |
| | Apt 3L MARIA A PEREZ |
| | FRANCIS J PERKINS |
| | BRODI PETTEN |
| | Apt 6T ROBERTO A PLUMA |
| | CARMINE L POLITANO |
| | I FERNANDEZ |
| | Apt 4R VALEDA FICAROTTA |
| | MERCEDES FIGUEREO |
| | DANIEL FIGUEROA |
| | ANDREW FILAKOVSKY |
| | JOSEPH M FINNELLE |
| | OTIS FRISBY |
| | ENA PINEDO |
| | Unit 36 MARY R PURCHER |
| | Apt 1R FLORENCE PUZIO |
| | PAULA BORREGO |
| | Apt 7T HUGH F BEATTIE |
| | Apt 7L MATHAES ERCEGOVICH |
| | Apt 3Q EVELYN M KNIGHT |
| | Apt 2J VERONICA KENNEDY |

## RIVERDALE AVE

**2005** (cont.) Cole Information

| | |
|---|---|
| 334 | Apt 5J FLORENCE M BREWSTER |
| | MOSES BROWN |
| | JACK BRUNNER |
| | NATHANIEL WALKER |
| | FREDERICK M EVANS |
| 350 | LISBETH REALES |
| | Apt 3 STEPHEN O ESELE |
| | Apt 2 MICHELLE F DIXON |
| 352 | RIVERDALE FOOD CENTER |
| 356 | TERENCE M OGRADY ANTIQUES |
| | Apt 1 ULISES S ACOSTA |
| | TERENCE M OGRADY |
| 358 | JOSE A SANTANA |
| | CARMEN R REYES |
| 360 | DONALD E MCAULIFFE |
| 362 | BRIAN K HUGHES |
| 372 | GOODYEAR AUTO SERVICE CENTER |
| 380 | RIVERDALE TAXI LTD |
| 390 | NATIONAL MOUNTAIN LINE INC |
| | TLC TRANSPORTATION CORP |
| | TLC TRANSPORTATION CORP OF WES |
| | MAVIS DISCOUNT TIRE |

## RIVERDALE AVE

**2005** Data Axle

| | |
|---|---|
| 334 | MUNICIPAL HOUSING AUTHORITY |

## RIVERDALE AVE

**2000** Cole Information

| | |
|---|---|
| 334 | JULIANA MATEO |
| | Apt 2D EUGENE MARCUS |
| | Apt 3P JOSEPH MAGLIO |
| | JOHN MAGAZINO |

# FINDINGS

## RIVERDALE AVE

**2000** (cont.) Cole Information

334 Apt 2L ELSIE CONCEPCION
FRANCES COUSLEY
M YOUNG
Apt 4H D DANIELS
FRANCES M DEROSA
Apt 6A JOSEPH K DONAHUE
Apt 5A ELSIE V HOLLAND
C HOY
Apt 7R I NOETZEL
Apt 1G STEPHEN NOVAK
ALVIN E NEEDAM
E NEUMAN
Apt 5R JAMES C IVERY
CHARLES TAGUE
LILLIAN TAYLOR
Apt 3F CELESTE GAITO
Apt 1J LOUIS GALLEGO
Apt 7K HELEN GARNTO
Apt 3A LUTHER GARRISON
GREGORY TROUMPAS
Apt 5B H GILL
JOSEPH C PARETTI
T PENA
Apt 7J JULIA PERCODANI
MARIA PEREZ
FRANCIS PERKINS
MARY R PURCHER
CARMINE POLITANO
Apt 7H MARION POLLICK
LOUIS PONTE
Apt 6T ROBERTO PLUMA
Apt 7T HUGH BEATTIE
Apt 1C GEORGE BAKER
C M BALLANNO
GLORIA V BAULTRIP
Apt 6C DOUGLAS BRAXTON
Apt 5J F M BREWSTER
DONATO BRUNI

## RIVERDALE AVE

**2000** (cont.) Cole Information

334 Apt 5F JAMES FAIR
RUDY FAILLA
Apt 4R ANTHONY FICAROTTA
Apt 2B CHESTER BIELSKI
LILLIAN KELLEHER
VERA KENNEDY
Apt 1B E FREEMAN
STEPHEN KRUCK
Unit A6B ENID KING
ANDREW ENGEL
GEORGE WALKER
THOMAS J WORRELL
F M EVANS
Apt 5K D WILBUR
Apt 4B GRACE WILSON
Apt 4B M WILSON
Apt 1H FRANK AVELLINO
Apt 4M EMANUEL ALEXANDROF
Apt 7K JOHN H ALLEN
JOSE ALMOVODAL
Apt 4I L ADILETTA
LOURINE ANDERSON
J ANAND
CESAR RAMIREZ
Apt 1T VERNA F ARCHIBALD
PETER P RINGLER
Apt 3I PAULINE ROCCO
ANTHONY RODRIGUEZ
E RODRIGUEZ
ELLEN MCKAY
Apt 3J WILLIAM J MCQUILLAN
E MILLS
C LOVALLO
F MORRIS
A CACERES
Apt 6B L O CARRINGTON
M LAND
Apt 5G HELEN LANZETTA

# FINDINGS

## RIVERDALE AVE

**2000** (cont.)

Cole Information

| | |
|---|---|
| 334 | EFRAIN LARA |
| | M SALON |
| | LEONIDA SANCHEZ |
| | SANTO SAPUTO |
| | Apt 6J A CREDENDINO |
| | Apt 6L ANNE A STEVENSON |
| | Apt 5P HENRY JOHNSON |
| | Apt 5P L JOHNSON |
| | Apt 1I LARRY JONES |
| | Unit 1 HORACIO JUICO |
| | E SPIVEY |
| | Apt 5D M R JOYNER |
| | Apt 7B J LEWIS |
| 343 | Unit 28 GLORIA A WORRELL |
| 350 | CARMELO RODRIGUEZ |
| | KIMBERL ROSADO |
| | Unit 4D RAYMOND B ROWAN |
| | LISBETH REALES |
| | CHACKO KURIEN |
| | P MEJIA |
| 352 | RIVERDALE FOOD CENTER |
| 354 | OCCUPANT UNKNOWN |
| 356 | TERENCE M OGRADY |
| | LUISA ACOSTA |
| 358 | OCCUPANT UNKNOWN |
| 360 | Apt 2 DONALD MCAULIFFE |
| 362 | IRMA VAZQUEZ |
| 372 | GOODYEAR AUTO SERVICE CENTE |
| 377 | RIVERDALE AUTO SVCE INCORPORATED |
| 388 | NIRAJ MANAGEMENT INCORPORATED |
| 390 | MUCIP INCORPORATED |
| | FIRESTONE DEVONSHIRE TIRE C |
| | DEVONSHIRE TIRE COMPANY |

## RIVERDALE AVE

**1995**

Cole Information

| | |
|---|---|
| 334 | DESMARAIS, LORETTA |
| | ROSARIO, FRANCISCO |
| | SHANKS, HELEN |
| | KELLEHER, L |
| | LELLA, N |
| | BERNHARDT, HELEN |
| | O'ROURKE, C E |
| | PURCHER, M R |
| | FAILLA, RUDY |
| | SMITH, DANIEL |
| | TAYLOR, GLORIA |
| | WALKER, GEORGE |
| | PLUMA, ROBERTO |
| | OFFENEY, E M |
| | SHORT, FRANK |
| | THOMSON, NEAL |
| | GALLIOS, CHRIS |
| | TAYLOR, L |
| | CONLAN, JOSEPH, SR |
| | GARRISON, LUTHER |
| | SHUTER, B |
| | HARTMAN, BEATRICE |
| | BAKER, GEORGE |
| | JOYNER, MARGARET R |
| | ADILETTA, LAWRENCE |
| | FAHEY, JAMES R |
| | STEVENSON, ANNE A |
| | GALLEGO, LOUIS |
| | SCHLEICHER, MARIE |
| | MARCUS, EUGENE |
| | PERCODANI, JULIA |
| | DEPOLE, HENRY |
| | EVANS, FREDK M |
| | DI SILVESTRO, JOSEPH |
| | JUICO, HORACIO |
| | DENISE, MILDRED |
| | MESSAR, E |
| | ANAND, JITINDER |

# FINDINGS

## RIVERDALE AVE

**1995** (cont.) Cole Information

| | |
|---|---|
| 334 | BIELSKI, CHESTER |
| | BLACKBURN, ELSIE |
| | BRUNI, DONATO |
| | BUTLER, M |
| | COUSLEY, FRANCES |
| | NOETZEL, I |
| | BULLA, JOSEPH |
| | WILSON, M |
| | ROCCO, PAULINE |
| | FRIEDMANN, INGEBORG |
| | RINGLER, PETER P |
| | BEREZ, MARIA |
| | GAITO, CELESTE |
| | CARABELLO, A C |
| | SERCANDER, EUGENE |
| | PENA, TOMASINA |
| | GILL, H |
| | STIVERS, DAVID |
| | RODRIGUEZ, E |
| | KRUCK, STEPHEN |
| | ORSINO, MILDRED |
| | ORZA, SAM |
| | ERCEGOVICH, MATHAES |
| | DIONISIO, LAURA |
| | LAWRYK, THEODORE |
| | POLLICK, MARION |
| | GRAZIANO, LOUIS |
| | BLESSING, EDWARD |
| | DE ROSA, FRANCES M |
| | LORIA, BETTY |
| | FICAROTTA, ANTHONY |
| | JOHNSON, L |
| | FANELLI, EVA |
| | DONAHUE, JOS KEVIN |
| | FREEMAN, E |
| | ALEXANDROF, EMMANUEL |
| | TROUMPAS, GREGORY |
| | BALLANNO, C M |

## RIVERDALE AVE

**1995** (cont.) Cole Information

| | |
|---|---|
| 334 | WILSON, GRACE |
| | KNIGHT, E |
| | VITO, NICHOLAS |
| | NOVAK, STEPHEN |
| | CRONIN, R M |
| | NICOL, M |
| | JOHNSON, HENRY |
| | KILCOYNE, WILLIAM |
| | PODRUZMY, S |
| | MONTILLA, JESUS |
| | IVANOFF, IZARIA |
| | BREWSTER, FLORENCE M |
| | DE SISTO, NICHOLAS A |
| | RYAN, JOHN J |
| | MCKAY, E |
| | CINQUEMANI, PAULINE |
| | STAMBLER, SAUL |
| | MAGAZINO, JOHN |
| | ENGEL, ANDREW |
| | KING, ENID |
| | CAPRA, REMO |
| 356 | ACOSTA, LUISA |
| | MULLER, KARL |
| | O'GRADY, TERENCE |
| 358 | VAZQUEZ, M |
| 360 | MCAULIFFE, DONALD |
| 372 | GOODYEAR AUTO SERVICE CENTERS-YONKERS |
| 377 | RIVERDALE AUTO SVCE INC |
| 388 | DEVONSHIRE LANE INC |
| 390 | A 1 OXYGEN SVCE CO |
| | A 1 WHEEL CHAIR & SICK ROOM SVCE CO |
| | A A AMBULETTE INC |
| | A A INVALID CHAIR & HOSP SUPPLY CO |
| | AMBULANCE SVCE OF BRONX COUNTY |
| | MUCIP INC |
| | WARHIT, GEORGE |
| | A 1 AMBULANCE & HOSP EQUIPT |

# FINDINGS

## RIVERDALE AVE

**1995** (cont.) Cole Information

390 A A AMBULANCE & OXYGEN SVCE CO INC
FIRESTONE DEVONSHIRE TIRE CO
DEVONSHIRE TIRE CO

## RIVERDALE AVE

**1992** Cole Information

334 MITCHELL, JOHN
DUNNE, J
BAUM, HAROLD J
CINQUEMANI, PAULINE
NICOL, M
DE SISTO, NICHOLAS A
BALLANNO, C M
CAPRA, REMO
KNIGHT, E
GARIOLA, ANTHONY
GRAZIANO, LOUIS
LAWRYK, THEODORE
DEPOLE, HENRY
STAMBLER, SAUL
VITO, NICHOLAS
HAYES, FRANCIS J
DE ROSA, FRANCES M
DIONISIO, LAURA
FEINBERG, JOSEPH
FREEMAN, E
BLESSING, EDWARD
RODRIGUEZ, E
WILSON, M
SERCANDER, EUGENE
CZECH, JOHN
VENTURINI, AMORE
PAOLILLO, VINCENT
THORPE, GEORGE
CIOFFREDI, JAMES V

## RIVERDALE AVE

**1992** (cont.) Cole Information

334 ALEXANDROF, EMMANUEL
DONAGHY, JOHN F
FICAROTTA, ANTHONY
JOHNSON, L
FANELLI, EVA
CRONIN, R M
KING, ENID
WILSON, GRACE
BREWSTER, FLORENCE M
NOVAK, STEPHEN
ROSARIO, FRANCISCO
BULLA, JOSEPH
WALSH, EDWARD J
SPIRITO, MARY
POLANSKY, L
BLACKBURN, ELSIE
DESMARAIS, LORETTA
OFFENEY, E M
KELLEHER, L
ORZA, SAM
ORSINO, MILDRED
LELLA, N
SHUTER, B
KRUCK, STEPHEN
PALUMBO, J
CARABELLO, A C
PURCHER, M R
BERNHARDT, HELEN
GALLAGHER, JOSEPH J
HUGHES, TERESA
THOMSON, NEAL
PLUMA, ROBERTO
TAYLOR, L
ERCEGOVICH, MATHAES
SIUDYM, IRENE
BRUNI, DONATO
VOSE, JOHN E
ROBERTSON, L M

# FINDINGS

## RIVERDALE AVE

**1992** (cont.) Cole Information

| | |
|---|---|
| 334 | MESSAR, E |
| | MONTILLA, JESUS |
| | BAKER, LAWRENCE J |
| | MAITRE, FRANK |
| | SHANKS, HELEN |
| | DI SILVESTRO, JOSEPH |
| | MARCUS, EUGENE |
| | HARTMAN, GEO |
| | STEVENSON, ANNE A |
| | O'ROURKE, C E |
| | FAHEY, JAMES R |
| | PERCODANI, JULIA |
| | CARRANO, M |
| | SMITH, DANIEL |
| | SCHLEICHER, MARIE |
| | ROCCO, PAULINE |
| | NIAZIAN, SARA |
| | RINGLER, PETER P |
| | EVANS, FREDK M |
| | BIELSKI, CHESTER |
| | BACON, MARTHA |
| | KELLY, PETER R |
| | GALLIOS, CHRIS |
| | TROUMPAS, GREGORY |
| | FLYNN, E |
| | WILLIAMS, MARY |
| | GARRISON, LUTHER |
| | KIERNAN, JANE F |
| | NOETZEL, I |
| | POLI, LOUIS |
| | JOYNER, MARGARET R |
| | SHORT, FRANK |
| | JARVIS, M |
| | BUTLER, M |
| | TAYLOR, GLORIA |
| | DENEVE, AUGUSTO |
| | GAITO, CELESTE |
| | COUSLEY, FRANCES |

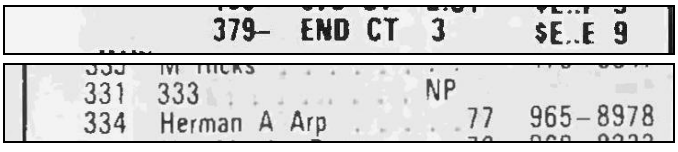
## RIVERDALE AVE

**1992** (cont.) Cole Information

| | |
|---|---|
| 334 | DE BUONO, THOMAS |
| 345 | CON ELECTRIC CONTRACTING |
| | RIVERDALE DEVELOPMENT |
| 350 | TORRES, SANTIAGO |
| 352 | YONKERS FIRST GROCERY & DELI |
| 356 | MULLER, KARL |
| | O GRADY, TERENCE |
| 358 | VAZQUEZ, M |
| 362 | MOKHTAR, AHMED M |
| 372 | GOODYEAR TIRE & RUBBER CO THE-AUTO SERVICE CENTERS-YONKERS |
| 377 | RIVERDALE AUTO SVCE INC |
| 388 | DEVONSHIRE LANE INC |
| 390 | A A INVALID CHAIR & HOSP SUPPLY CO |
| | AMBULANCE SVCE OF BRONX COUNTY |
| | DEVONSHIRE TIRE CO |
| | FIRESTONE DEVONSHIRE TIRE CO |
| | A A AMBULETTE INC |
| | FIRESTONE OF YONKERS |
| | WARHIT, GEORGE |
| | ALL BORO HOME CARE & RESPITORY SVCES |
| | ARIPS INC |
| | HUNTER AMBULANCE INC |
| | A A AMBULANCE & OXYGEN SVCE CO INC |
| | AMERICAN MEDICAL TRANSPORT INC |
| | ALL BORO HOME CARE & RESPIRATORY SVCES |
| | A 1 AMBULANCE & HOSP EQUIPT |
| | A 1 OXYGEN SVCE CO |
| | A 1 WHEEL CHAIR & SICK ROOM SVCE CO |
| | A A AMBULANCE |

## RIVERDALE AVE

**1987** Cole Publications



## RIVERDALE AVE

**1987** (cont.) Cole Publications

| | | | |
|---|---|---|---|
| 334 | Herman A Arp | | |
| | Mrs Martha Bacon | 72 | 968-8233 |
| | Lawrence J Baker | 83 | 964-0844 |
| | Walter Beanland | 72 | 963-7151 |
| | Chester Bielski | 80 | 968-8197 |
| | Mrs E Blackburn | 72 | 968-2522 |
| | A N Blanchard Jr | - | 968-5308 |
| | Roland Brennan | 72 | 963-4876 |
| | A Bruno | 84 | 423-1653 |
| | Joseph Bulla | 84 | 969-5181 |
| | William J Burke | 84 | 968-0345 |
| | M Butler | 76 | 968-0167 |
| | Mrs S Butler | 73 | 968-4351 |
| | A Cain | 82 | 965-5492 |
| | Remo Capra | 84 | 423-3924 |
| | M Carrano | 84 | 963-8655 |
| | Mrs R Church | 72 | 965-1344 |
| | James V Cioffredi | 85 | 476-0353 |
| | A Connery | 85 | 963-0510 |
| | Patsy Controne | 82 | 969-4432 |
| | Mrs F Cousley | 81 | 968-8358 |
| | A B Curtin | 72 | 969-3314 |
| | John Czech | 80 | 968-7217 |
| | Frank T Debroske | 72 | 968-2295 |
| | John Debroske | 72 | 963-9832 |
| | M Decarmo | ¤ | 964-1505 |
| | Joseph Depole | 72 | 423-8372 |
| | Nicholas A Desisto | - | 423-8269 |
| | Jos Disilvestro | ¤ | 963-9876 |
| | Charles P Doerner | 84 | 963-1264 |
| | John F Donaghy | 82 | 476-2106 |
| | J Dunne | 79 | 423-6162 |
| | G Durand | 72 | 423-5987 |
| | Mathaes Ercegovich | 77 | 968-5960 |
| | Frederick M Evans | 72 | 963-2946 |
| | James R Fahey | 80 | 963-7391 |
| | K Feeley | 72 | 476-6835 |
| | E Freeman | 84 | 476-7522 |
| | Celeste Gaito | ¤ | 964-5273 |
| | Joseph J Gallagher | 85 | 969-0634 |
| | Chris Gallios | 72 | 969-6152 |
| | Anthony Gariola | - | 337-3255 |
| | E Hart | - | 969-1431 |
| | William Haughey | 77 | 968-4574 |
| | F Heeney | 84 | 965-3292 |
| | Lucy Herscheler | 75 | 969-6750 |
| | Teresa Hughes | 72 | 968-0485 |
| | Philip Human | 80 | 476-4108 |
| | Charles Jakubek | 72 | 969-2165 |
| | L Jazzo | ¤ | 965-5741 |
| | L Johnson | 76 | 476-8985 |
| | George E Kalata | 82 | 968-0459 |
| | L Kelleher | ¤ | 968-5738 |
| | Mrs Peter R Kelly | 72 | 969-1467 |
| | Jane F Kiernan | 83 | 963-1384 |
| | Mrs Sofia Kmetz | 72 | 963-0181 |
| | E Knight | 79 | 375-0794 |
| | Peter Koval | 72 | 963-6831 |
| | William E Krieger | 75 | 965-7944 |
| | Stephen Kruck | 84 | 968-4385 |
| | R Lampa | 84 | 965-5315 |
| | Theodore Lawryk | 84 | 423-8586 |

## RIVERDALE AVE

**1981** Cole Publications

| | | |
|---|---|---|
| 331 | Charles V Runge | 968-5078 |
| 333 | Mrs L S Darmiento | 965-7218 |
| | Carmine J Maccio | 968-5706 |
| 334 | M Anselmo ¤ | 476-4336 |

## RIVERDALE AVE

**1981** (cont.) Cole Publications

Herman A Arp .....77 965-8978
Mrs Martha Bacon .....72 968-8233
Mary Bannon .....72 969-3002
E Bascarino .....79 963-2092
Walter Beanland .....72 963-7151
Chester Bielski .....- 968-8197
Mrs E Blackburn .....72 968-2522
Roland Brennan .....72 963-4876
Mrs E Bresnahan .....79 965-5720
Alfred Brown .....72 968-7585
M Butler .....76 968-0167
Mrs S Butler .....73 968-4351
Thomas Cain .....72 965-5492
James P Carey ..... 969-0446
Mrs R Church .....72 965-1344
Mrs Rose Connors .....72 423-2537
A B Curtin .....72 969-3314
E Curtin .....75 476-1417
John Czech .....- 968-7217
Frank T Debroske .....72 968-2295
John Debroske .....72 963-9832
Joseph Depole .....72 423-8372
Alfred J Doherty .....72 476-5165
G H Downey .....72 963-7846
J Dunne .....79 423-6162
G Durand .....72 423-5987
Mathaes Ercegovich .....77 968-5960
Fredenck M Evans .....72 963-2946
James R Fahey .....- 963-7391
K Feeley .....72 476-6835
Etta Fitzgerald .....72 423-1098
E S Francis .....77 476-9265
Sidney Fried .....74 423-7287
Chris Gallios .....72 969-6152
Mrs Laura Galloway .....79 423-4195
Bertha Giones .....72 423-6674
Frank Goff .....72 423-3296
James Grady .....72 968-3204
William Haughey .....77 968-4574
Lucy Herscheler .....75 969-6750
Joseph Hruska .....72 968-2344
Teresa Hughes .....72 968-0485
Philip Human .....¤ 476-4108
Charles Jakubek .....72 969-2165
L Johnson .....76 476-8985
Celia Kardonsky .....72 968-9020
Mrs Margt Kavanah .....79 963-2394
M Kelly .....75 476-4109
Mrs Peter R Kelly .....72 969-1467
Michael J Kennedy .....75 968-5460
Mrs Sofia Kmetz .....72 963-0181
E Knight .....79 375-0794
Peter Koval .....72 963-6831
William E Kneger .....75 965-7944
Mrs Joseph Larosa .....72 476-4854
N Lella .....77 968-7531
Mrs Margaret Lesko .....72 476-0308
S Lev .....72 476-4211
Mrs Gertrude Lewis .....75 963-2838
H Lombard .....72 969-4949
Nicholas Maccia .....72 968-6280
Joseph E Maclocha .....73 476-7850
Margaret Maguire .....72 969-6397

## RIVERDALE AVE

**1981** (cont.) Cole Publications

334 Mildred Orsino .....76 968-9427
Sam Orza .....72 969-6639
Vincent Paolillo .....72 965-5579
A Pencola .....- 969-3412
P Poslusny .....72 476-8678
C Post .....72 963-0109
John J Powers .....72 963-2397
Mrs Thos Richards .....77 963-6672
Peter Riess .....75 423-3768
Peter P Ringler .....72 968-2778
[illegible] .....

335 .....NP
339 Ronald Tytlar .....74 476-5218
343 Philip Simonetti .....78 963-3524
William Spano ..... 969-5114
344 .....NP
345 James Lee .....75 476-8978
Herbert L Ritchie .....68 969-0163
346 .....NP

**POST**

350 John Pavan .....71 963-4611
M R Purcher .....68 969-4419
Nicholas A Spano .....75 969-0047
352 Nicholas Spano .....¤ 963-9698
Nicholas Spano .....¤ 969-3380
**353★A Coopers Actn RMS .. 965-4075**
**★Alfred Cooper Inc ..... 965-4075**
**★Cooper Galeries ..... 965-4075**
354 Elena Ardon .....77 968-2444
355 .....NP
356 Nathan Jacobs .....74 476-5220
Karl Muller ..... 969-0740
358 Morris Rautenberg .....69 969-4167
359 .....NP
360 Jeanette Fecko .....- 476-9655
362 .....NP
369 Andrew Roche .....78 968-8832

**CULVER**

371 William P Hayes .....73 969-1075
**372★Goodyear Tire ..... 965-3333**
374 .....NP
**377★Riverdale Auto Srv .... 969-9930**
[illegible] .....

**390★Devonshire Garage ..... 969-3939**
**★Devonshire Tire Co .... 969-3939**
**★Firestne Devnshre ..... 969-3939**
**★Firestone Yonkers ..... 969-3939**
**★Holiday Dr-Ur-Self ..... 969-3939**
**★George Warhit ..... 969-5505**

# FINDINGS

## RIVERDALE AVE

**1977** Cole Publications

379- END TZ 3 SE..Q 7

331 Charles V Runge 968-5078
Mrs Ella M Trabin ¤ 963-2188
333 Mrs L S Darmiento YO5-7218
Carmine J Maccio 968-5706
334 Carlo Anselmo 2 476-4336
Mrs Martha Bacon 2 968-8233
Mary Bannon 2 969-3002
Charles Bascarino 2 963-2092

05 334 Alfred Cowles 2 423-7593
18 A B Curtin 2 969-3314
E Curtin 5 476-1417

18 335 NP
06 339 Ronald Tytlar 4 476-5218
36 343 William Spano YO9-5114
33 344 NP
02 345 James Lee 476-8978
92 Mary Purcher 8 969-4419
51 Herbert L Ritchie 8 969-0163
38 346 NP
53 **POST**
27 350 Nestor Crespo 965-6166
52 John Pavan 1 963-4611
22 Nicholas A Spano 5 969-0047
08 **352 ★S&M Delcatessen 969-9836**
76 **353 ★A Coopers Actn RMS 965-4075**
60 **★Alfred Cooper Inc 965-4075**
97 **★Cooper Galeries 965-4075**
85 354 Fermin Arzu – 969-1154
67 355 NP
51 **356 ★Berlnr Telvsn&Rado YO9-4882**
94 Nathan Jacobs 4 476-5220
92 Karl Muller YO9-0740
07 358 Morris Rautenberg 9 969-4167
46 359 NP
44 360 Daniel Walsh 476-0530
83 362 Mrs Alder Davis 0 423-8869
37 369 NP

370 Harold J Strothers 3 423-7840
Junior Walker 3 969-0829
**CULVER**
371 William P Hayes 3 969-1075
**372 ★Goodyear Tire 965-3333**
374 NP
**377 ★Riverdale Auto Srv YO9-9930**
386 NP
387 Mrs H S Auerbach 968-0562

## RIVERDALE AVE

**1977** (cont.) Cole Publications

**★J S Caterers Inc 969-4049**
Joseph Stallone 3 969-2368
**★Taco-Joey 969-4049**
**½Riverdale Bar&Grll 969-9094**
**390 ★Devonshire Garage YO9-3939**
**★Devonshire Tire Co YO9-3939**
**★Firstone Tire Co YO9-3939**
**★Firestone Yonkers YO9-3939**
**★Holiday Dr-Ur-Self YO9-3939**
**★George Warhit YO9-5505**
**391 ★Legri S Resistor 969-6000**
393 NP
**397 ★Spano Fuel Co YO3-9612**

## RIVERDALE AVE

**1976** Cole

3603*5 STAR RESTRNT INC 7961732

## RIVERDALE AVE

**1972** Cole Publications

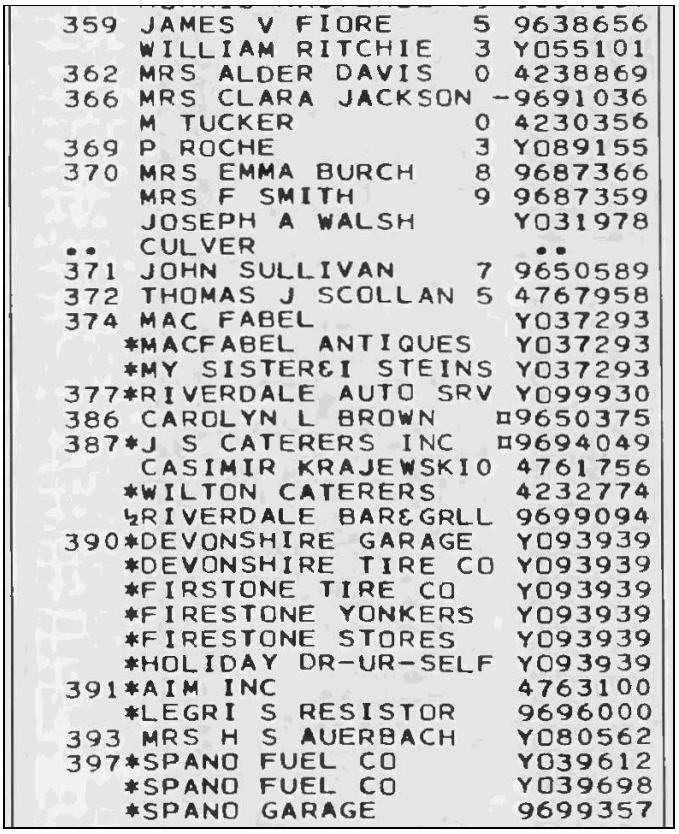
331 CHARLES V RUNGE 9685078
333 MRS L S DARMIENTO YO57218
LEONARD DARMIENTOO 9634410
CARMINE MACCIO YO85706
GERARDO PISTONE -9685557
335 WILLIAM OLEARY 9 4768113
343 J J MILONE 9 YO88321
MIKE SPANO YO32833
WILLIAM SPANO YO95114
344 NP
345 E MORRIS 0 9633122
MARY PURCHER 8 9694419
HERBERT L RITCHIE8 9690163
346 NP

350 JOHN PAVAN ¤4765836
352*S&M DELCATESSEN 9699836
353*COOPER GALLERIES 9690021
354 J DESOTO ¤4766967
ALFREDO LINARES 9 4765423
355 GEORGE R BENZOLA 8 9655959
356*BERLNR TELVSN&RADO YO94882
KARL MULLER YO90740
358 CHARLES J HEARN YO35768
MORRIS RAUTENBERG9 9694167

# FINDINGS

## RIVERDALE AVE

**1972** (cont.) Cole Publications



| | | | |
|---|---|---|---|
| 359 | JAMES V FIORE | 5 | 9638656 |
| | WILLIAM RITCHIE | 3 | YO55101 |
| 362 | MRS ALDER DAVIS | 0 | 4238869 |
| 366 | MRS CLARA JACKSON | - | 9691036 |
| | M TUCKER | 0 | 4230356 |
| 369 | P ROCHE | 3 | YO89155 |
| 370 | MRS EMMA BURCH | 8 | 9687366 |
| | MRS F SMITH | 9 | 9687359 |
| | JOSEPH A WALSH | | YO31978 |
| .. | CULVER | | .. |
| 371 | JOHN SULLIVAN | 7 | 9650589 |
| 372 | THOMAS J SCOLLAN | 5 | 4767958 |
| 374 | MAC FABEL | | YO37293 |
| | *MACFABEL ANTIQUES | | YO37293 |
| | *MY SISTER&I STEINS | | YO37293 |
| 377 | *RIVERDALE AUTO SRV | | YO99930 |
| 386 | CAROLYN L BROWN | | ¤9650375 |
| 387 | *J S CATERERS INC | | ¤9694049 |
| | CASIMIR KRAJEWSKI | 0 | 4761756 |
| | *WILTON CATERERS | | 4232774 |
| | ½RIVERDALE BAR&GRLL | | 9699094 |
| 390 | *DEVONSHIRE GARAGE | | YO93939 |
| | *DEVONSHIRE TIRE CO | | YO93939 |
| | *FIRSTONE TIRE CO | | YO93939 |
| | *FIRESTONE YONKERS | | YO93939 |
| | *FIRESTONE STORES | | YO93939 |
| | *HOLIDAY DR-UR-SELF | | YO93939 |
| 391 | *AIM INC | | 4763100 |
| | *LEGRI S RESISTOR | | 9696000 |
| 393 | MRS H S AUERBACH | | YO80562 |
| 397 | *SPANO FUEL CO | | YO39612 |
| | *SPANO FUEL CO | | YO39698 |
| | *SPANO GARAGE | | 9699357 |

## RIVERDALE AVE

**1967** New York Telephone Co

329 Picarilli Jos ---------- YOnkrs 8-5078
331 Runge Chas V ---------- YOnkrs 5-7218
[illegible] Spano Mrs ---------- [illegible]

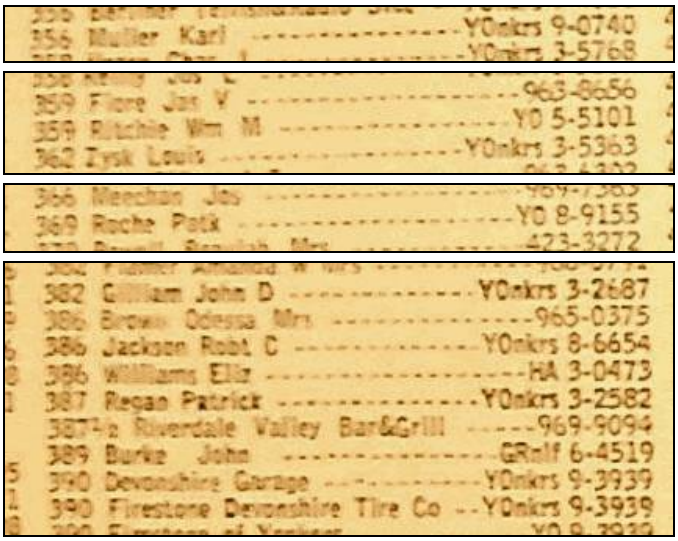
[illegible] ---------- YOnkrs 3-2833
343 Spano Mike ---------- YOnkrs 9-5114
343 Spano Wm ---------- YOnkrs 9-0427
344 Hession Jerome L ---------- YOnkrs 9-5442
344 Kar Walter M ---------- YOnkrs 8-5633
345 Coleman Jeremiah F ---------- YOnkrs 5-7433
345 Goldberg Harry V ---crt reprtr- YOnkrs 3-4331
346 Cristovan Aurora B ---------- 476-0240
346 Thomas Antone ----------

POST 350

350 Serbay Wm ---------- 476-3305
350 Spano Michl ---------- GR 6-1202

## RIVERDALE AVE

**1967** (cont.) New York Telephone Co



356 Muller Karl ---------- YOnkrs 9-0740
[illegible] ---------- YOnkrs 3-5768

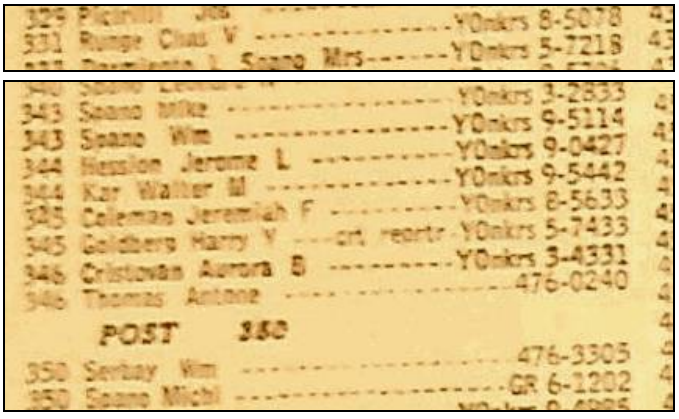
[illegible] ---------- 963-8656
359 Fiore Jos V ---------- YO 5-5101
359 Ritchie Wm M ---------- YOnkrs 3-5363
362 Zysk Louis ---------- [illegible]

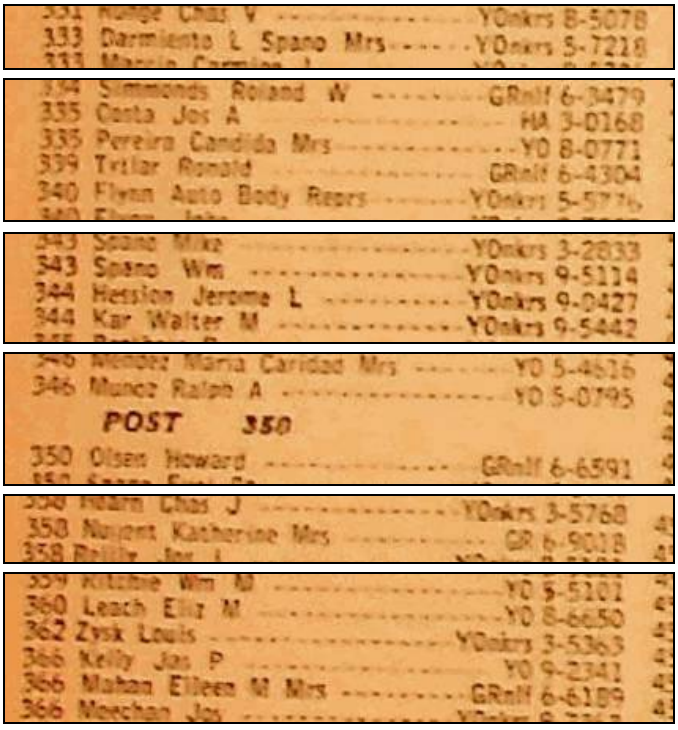
366 Meechan Jos ---------- [illegible]
369 Roche Patk ---------- YO 8-9155
[illegible] ---------- 423-3272

[illegible]
382 Gilliam John D ---------- YOnkrs 3-2687
386 Brown Odessa Mrs ---------- 965-0375
386 Jackson Robt C ---------- YOnkrs 8-6654
386 Williams Eliz ---------- HA 3-0473
387 Regan Patrick ---------- YOnkrs 3-2582
387½ Riverdale Valley Bar&Grill ---------- 969-9094
389 Burke John ---------- GRnlf 6-4519
390 Devonshire Garage ---------- YOnkrs 9-3939
390 Firestone Devonshire Tire Co -- YOnkrs 9-3939
[illegible]

## RIVERDALE AVE

**1963** New York Telephone Co





331 Runge Chas V ---------- YOnkrs 8-5078
333 Darmiento L Spano Mrs ---------- YOnkrs 5-7218
[illegible]

334 Simmonds Roland W ---------- GRnlf 6-3479
335 Costa Jos A ---------- HA 3-0168
335 Pereira Candida Mrs ---------- YO 8-0771
339 Tytlar Ronald ---------- GRnlf 6-4304
340 Flynn Auto Body Reprs ---------- YOnkrs 5-5776
[illegible]

343 Spano Mike ---------- YOnkrs 3-2833
343 Spano Wm ---------- YOnkrs 9-5114
344 Hession Jerome L ---------- YOnkrs 9-0427
344 Kar Walter M ---------- YOnkrs 9-5442
[illegible]

346 Mendez Maria Caridad Mrs ---------- YO 5-4616
346 Munoz Ralph A ---------- YO 5-0795

POST 350

350 Olsen Howard ---------- GRnlf 6-6591
[illegible]

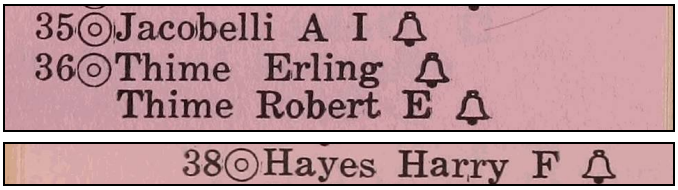
358 Hearn Chas J ---------- YOnkrs 3-5768
358 Nugent Katherine Mrs ---------- GR 6-9018
358 Reilly Jos J ---------- [illegible]

359 Ritchie Wm M ---------- YO 5-5101
360 Leach Eliz M ---------- YO 8-6650
362 Zysk Louis ---------- YOnkrs 3-5363
366 Kelly Jas P ---------- YO 9-2341
366 Mahan Eileen M Mrs ---------- GRnlf 6-6189
366 Meechan Jos ---------- [illegible]

# FINDINGS

## RIVERDALE AVE

**1962** Price And Lee Co


35◎Jacobelli A I
36◎Thime Erling
Thime Robert E
38◎Hayes Harry F

## RIVERDALE AVE

**1940** New York Telephone

387 Yonkers Coat Apron & Linen Supply Co

## RIVERDALE AVE

**1927** Polk Directory Co

350 Post
373 Culver

## RIVERDALE AVE

**1924** Richmond Directory Co


350 * Post
378 * Culver

## RIVERDALE AVE

**1919** W L Richmond

350 * Post
378 * Culver

# FINDINGS

## ASHTON RD

**2024** Cole Information

2 MONICA D YIZAR-ROGER
3 JOHN BEHRENDT

## ASHTON RD

**2022** Cole Information

2 Monica D Yizar-Rogers
3 John Behrendt

## ASHTON RD

**2017** Cole Information

2 SHANTE N ROGERS
3 GIBSON DUNN & CRUTCHER LLP
CHRISTINE E JONES

## ASHTON RD

**2014** Cole Information

2 BURL L ROGERS
3 BEULAH D JONES

## ASHTON RD

**2010** Cole Information

2 BURL L ROGERS
3 JOHNNY B JONES

## ASHTON RD

**2005** Cole Information

2 YMMIJ LLC
OCCUPANT UNKNOWN
3 JOHNNY B JONES

## ASHTON RD

**1987** Cole Publications

2 Edward P Pawlowski . . .67 423-3405
3 Josephine B Jones . . . .79 963-5253

## ASHTON RD

**1981** Cole Publications

2 Edward P Pawlowski . . . .67 423-3405
3 Gabriel Armstrong . . . . . .79 963-9302
Josephine B Jones . . . . .79 963-5253

## ASHTON RD

**1977** Cole Publications

2 Edward P Pawlowski 7 423-3405
3 Christine E Jones 3 963-9302

## ASHTON RD

**1972** Cole Publications

2 EDWARD P PAWLOWSKI

## ASHTON RD

**1967** New York Telephone Co

2 Pawlowski Edw P ---------- 423-3405
6 Bender Shirley Mrs ---------- 963-9163

# FINDINGS

## BEECHWOOD TER

**2014** Cole Information

| | |
|---|---|
| 14 | SUSAN M BEAR |

## BEECHWOOD TER

**2010** Cole Information

| | |
|---|---|
| 14 | SUSAN M BEAR |

# FINDINGS

## HAWTHORNE AVE

**2024** Cole Information

| | |
|---|---|
| 314 | CARLENE S WALKER |
| | OSVALDO SANCHEZ |
| 322 | PAUL JAMES |
| 324 | LEAL ARTURO |
| | AYDEE ILAGORRE |
| | SAM GOWL |
| 326 | Hi-Tech Security And Sound Inc |
| | ERNESTO ROSARIO |
| 332 | MATEO MARTINEZ |
| | HENRY MARTINEZ SR |
| | ARIEL MARTINEZ |
| 336 | JOSE L SORIANO |
| | SALOMON G ZUNIGA |
| 338 | PAUL D PORTER |
| 339 | SIMON QUINCHE |
| 340 | SHANEQUA HAYNES |
| | DANA MESSANA |
| | ANDREW B MACKLE |
| 343 | Dahdal Nezar Md |
| | NASEEM W DAHDAL |
| | AIDA N DAHDAL |
| | DEMAH ZAYED |
| 346 | GEORGE REID |
| | ALSON L FARLEY |
| 348 | SIMEI DIAZ |
| 372 | YUMIEN K LU |
| | YU JASON |
| 376 | DANA MASTRONARDI |
| | ANTHONY CRISTIANO |
| | MARK RATTENNI |

## HAWTHORNE AVE

**2022** Cole Information

| | |
|---|---|
| 314 | Dalton O Powis |
| 322 | Paul James |

## HAWTHORNE AVE

**2022** (cont.) Cole Information

| | |
|---|---|
| 324 | RESEARCH FOUNDATION FOR MENTAL HYGIENE INC |
| | Aydee Ilagorre |
| 326 | HI-TECH SECURITY AND SOUND INC. |
| | Ernesto Rosario |
| 332 | Mateo Martinez |
| 338 | Paul D Porter |
| 339 | Simon Quinche |
| 340 | Apt 3 Shanequa Haynes |
| | Apt 1 Andrew B Mackle |
| | Apt 2 Patricia Jacobs |
| | Apt 2 Dana Messana |
| | Apt 2 Marci C Baak |
| 343 | # 2 Aida N Dahdal |
| | # 2 Naseem E Dahdal |
| | Demah Zayed |
| 346 | George Reid |
| 350 | YONKERS CITY SCHOOL DISTRICT |
| | CHARTER SCHOOL FOR EDUCATIONAL |
| | YONKERS PUBLIC SCHOOLS |
| | PEARLS HAWTHORNE SCHOOL |
| 372 | Yu Jason |
| 376 | Anthony Cristiano |
| | Dana Mastronardi |

## HAWTHORNE AVE

**2022** Data Axle

| | |
|---|---|
| 343 | USPS BLUE COLLECTION BOX |

## HAWTHORNE AVE

**2017** Cole Information

| | |
|---|---|
| 314 | JOSE CARRION |
| | DALTON POWIS |

# FINDINGS

## HAWTHORNE AVE

**2017** (cont.) Cole Information

| | |
|---|---|
| 314 | CHARMAINE WRIGHT |
| 322 | PAUL A JAMES |
| 324 | AYDEE ILAGORRE |
| | Apt 1 ARTURO LEAL |
| 326 | HI-TECH SECURITY AND SOUND INC |
| | FRANK F CRUZ |
| | STEPHANIE REYNOSO |
| | DEEPAK SOLOMON |
| 330 | PAULO C PEREIRA |
| 332 | MARTINEZ MATEO |
| | LUIS GARCIA |
| | HENRY MARTINEZ |
| | GUADALUPE TLATELPA |
| 336 | LUPITAS ACCESSORIES |
| | GINA HENERA |
| | Apt 1 JOSE L SORIANO |
| | Apt 3 LIZANDRO M ZUNIGA |
| 338 | PAUL D PORTER |
| 339 | SIMON E QUINCHE |
| 340 | Apt 1 ANDREW B MACKIE |
| | Apt 3 ELWOOD A THORN |
| 343 | XAVIER CORP OF YONKERS |
| | # 1 DAVID N DAHDAL |
| 346 | Apt 2 KIMONE DUNCAN |
| | GEORGE W REID |
| 372 | YU M LU |
| 376 | ANTHONY CRISTIANO |
| | BILL L PANDISCIA |

## HAWTHORNE AVE

**2017** Data Axle

| | |
|---|---|
| 350 | PEARLS HAWTHORNE SCHOOL |

## HAWTHORNE AVE

**2014** Cole Information

| | |
|---|---|
| 314 | RAFAEL AZCONA |
| | DALTON POWIS |
| | CARLENE WALKER |
| | CHARMAINE WRIGHT |
| 322 | PAUL A JAMES |
| 324 | Apt 1 ARTURO LEAL |
| | AYDEE ILAGORRE |
| | Unit 2 SERGIO TORRES |
| 326 | FRANK F CRUZ |
| | STEPHANIE REYNOSO |
| 330 | JOSE M PEREIRA |
| 332 | Unit 2 NUBIA E BOWMAN |
| | Unit 1 HENRY MARTINEZ |
| 336 | GUADALUPE E ZUNIGA |
| | JOSE L SORIANO |
| | GINA HENERA |
| 338 | PAUL D PORTER |
| 339 | Unit 3 SERGIO G QUINCHE |
| | Unit 2 SERGIO BELTRE |
| | SERGIO BELTREV |
| 340 | Apt 1 ANDREW B MACKIE |
| | Apt 3 ELWOOD G THORN |
| 343 | # 2 NEZAR W DAHDAL |
| | # 1 MARTY W DAHDAL |
| 346 | GEORGE W REID |
| 348 | YONKERS PUBLIC SCHOOLS |
| 372 | LU YU |
| 376 | BILL J PANDISCIA |
| | JOHN E RATTENNI |
| | ANTHONY CRISTIANO |

## HAWTHORNE AVE

**2014** Data Axle

| | |
|---|---|
| 336 | LUPITA ACCESSORIES |
| 350 | PEARLS HAWTHORNE SCHOOL |

# FINDINGS

## HAWTHORNE AVE

**2010** Cole Information

| | |
|---|---|
| 314 | DALTON POWIS |
| 322 | PAUL A JAMES |
| 324 | RESEARCH FOUNDATION FOR MENTAL |
| | ARTURO LEAL |
| | JUAN VERA-ORTIZ |
| | FERNANDO ORTIZ |
| 326 | BASKAR N DORAIRAJ |
| | BERNICE DEVASAHAYAM |
| 330 | JOSE PEREIRA |
| 332 | MATEO MARTINEZ |
| 336 | ALMA GARCIA |
| | GINA HENERA |
| | SALOMON ZUNIGA |
| 338 | HARRY T PORTER |
| 339 | Unit 3 SIMON E QUINCHE |
| | Unit 2 CELIA B BELTRE |
| 340 | ANDREW B MACKIE |
| 343 | MARTY W DAHDAL |
| 346 | O HAYNES |
| | GEORGE W REID |
| | KEVIN A MCGILL |
| 348 | OCCUPANT UNKNOWN |
| 350 | PEARLS HAWTHORNE SCHOOL |
| | ROK BUILT CONSTRUCTION |
| 354 | NOSH LUIGJURAJ |
| 372 | YU M LU |
| 376 | ANTHONY CRISTIANO |
| | Unit 2 JOHN E RATTENNI |
| | Unit 1 BILL J PANDISCIA |

## HAWTHORNE AVE

**2005** Cole Information

| | |
|---|---|
| 314 | HUNTER D ROTH |
| 322 | PAUL JAMES |
| 324 | OMAR S SAYEGH |

## HAWTHORNE AVE

**2005** (cont.) Cole Information

| | |
|---|---|
| 326 | USMOLMOL PRASAD |
| 330 | OCCUPANT UNKNOWN |
| 332 | MARIA GUERRERO |
| | SRIKANTH PATLORI |
| | MATEO MARTINEZ |
| | Unit 3 JULIO C MUNOZ |
| 336 | CESAR GARCIA |
| 338 | HARRY T PORTER |
| 339 | Unit 2 CELIA B BELTRE |
| | Unit 3 SIMON E QUINCHE |
| 340 | OCCUPANT UNKNOWN |
| 343 | RONNIES ABC INC |
| | # 2 NASEEM W DAHDAL |
| | MARWAN DAHDAL |
| 346 | O HAYNES |
| | I GARCIA |
| | GEORGE W REID |
| | ILA WILLIAMS |
| | PATRICK J KISSANE |
| | Apt 1 L STEWART |
| 348 | YONKERS PUBLIC SCHOOLS |
| 354 | NOSH LUIGJURAJ |
| 372 | YU M LU |
| 376 | JOYN SZAKOICZAY |
| | ANTHONY CRISTIANO |
| | Unit 1 BILL J PANDISCIA |

## HAWTHORNE AVE

**2000** Cole Information

| | |
|---|---|
| 314 | JACK ROTH |
| 322 | VIVIENE JAMES |
| 324 | OCCUPANT UNKNOWN |
| 326 | EDWARD J JEREMIAH |
| 328 | OCCUPANT UNKNOWN |
| 330 | OCCUPANT UNKNOWN |

# FINDINGS

## HAWTHORNE AVE

**2000** (cont.) Cole Information

| | |
|---|---|
| 332 | MATEO MARTINEZ |
| 336 | Apt 2 MAURA CAMPOS |
| | SUSAN BORRELLI |
| 338 | HARRY PORTER |
| | ARNOLD L GAITHER |
| 339 | Unit 2 CELIA BELTRE |
| | Unit 3 JOVANI QUINCHE |
| 340 | MELISSA YOUSSI |
| 342 | OCCUPANT UNKNOWN |
| 343 | MARWAN DAHDAL |
| 345 | OCCUPANT UNKNOWN |
| 346 | ROBERT TORRES |
| 353 | J B JONES |
| 372 | JASON C LU |
| 376 | ANTHONY CRISTIANO |
| | JOHN A RATTENNI |
| | Unit 1 BILL PANDISCIA |

## HAWTHORNE AVE

**1995** Cole Information

| | |
|---|---|
| 314 | ROTH, ARTHUR |
| | GIANNETTA, EDWARD J |
| 322 | JAMES, VIVIENE |
| 324 | ORTIZ, LUCINDA |
| 326 | JEREMIAH, EDWARD JACOB |
| 330 | PEREIRA, JOSE |
| 336 | COLLINS, J |
| | BORRELLI, PATSY |
| 338 | PORTER, PAUL |
| | PORTER, HARRY |
| | PORTER, MONIQUE |
| | PORTER, J |
| 339 | DEMERS, MICHAEL |
| | GOLDMAN, LEONARD B |
| 340 | YAPOR, PEDRO |

## HAWTHORNE AVE

**1995** (cont.) Cole Information

| | |
|---|---|
| 340 | MACKLE, ANDREW |
| 343 | DAHDAL, BADIA |
| | DAHDAL, NASEEM |
| | DAHDAL, MARWAN |
| 346 | KISSANE, PATRICK |
| 372 | LU, JASON C C |
| 376 | PANDISCIA, BILL |
| | RATTENNI, JOHN A |
| | CRISTIANO, ANTHONY |
| | PANDISCIA, TERESA |

## HAWTHORNE AVE

**1992** Cole Information

| | |
|---|---|
| 314 | ROTH, ARTHUR |
| | JACOBSON, ESTHER |
| | ROTH, JACK |
| 322 | LEMISCHAK, WALTER |
| 324 | SAYEGH, OMAR |
| 326 | JEREMIAH, EDWARD JACOB |
| | MATHAI, JOSEPH K |
| 330 | PEREIRA, JOSE |
| 332 | SCHIAVONE, J |
| 336 | BORRELLI, PATSY |
| | COLLINS, J |
| 338 | O'ROURKE, CECILIA |
| 339 | ISAAC, JOHN |
| | GOLDMAN, LEONARD B |
| 340 | DUNKEL, JULIE |
| | MACKLE, ANDREW |
| | DUNAY, J |
| | DOHERTY, MARY |
| 343 | DAHDAL, BADIA |
| | DAHDAL, MARWAN |
| | DAHDAL, NASEEM |
| 346 | KISSANE, PATRICK |

# FINDINGS

## HAWTHORNE AVE

**1992** (cont.) Cole Information

372 LU, JASON C C
376 CRISTIANO, ANTHONY
RATTENNI, JOHN A
PANDISCIA, BILL

## HAWTHORNE AVE

**1987** Cole Publications

| | | | | |
|---|---|---|---|---|
| 314 | Esther Jacobson | .73 | | 963-7248 |
| | Arthur Roth | .73 | | 963-4253 |
| | Jack Roth | .82 | | 965-4054 |
| 322 | Mrs Iris Forcucci | | ¤ | 964-8842 |
| 324 | | NP | | |
| 326 | Irini Stamos | .85 | | 965-7843 |
| | Theoni Stamos | | ¤ | 964-8319 |
| 329 | Walter Hershaff | .68 | | 969-0817 |
| 330 | Jose Pereira | .76 | | 968-4786 |
| 331 | Roger Wszolek | .75 | | 965-4765 |
| 332 | Nicholas Vito | .74 | | 423-0128 |
| 336 | Patsy Borrelli | .62 | | 968-7918 |
| | J Collins | .79 | | 423-9627 |
| | Louise Kellegrew | .67 | | 423-2025 |
| 338 | Joseph Ciero | .84 | | 969-5351 |
| 339 | Leonard B Goldman | .68 | | 476-5154 |
| | John Isaac | .77 | | 968-6778 |
| 340 | R Darco | | ¤ | 378-1639 |
| | Ciro Guzman | .84 | | 968-8645 |
| 343 | Naif W Dahdal | .82 | | 965-7334 |
| | Wadi Dahdal | .74 | | 968-8887 |
| | ★ Sams Svce | .85 | | 476-5571 |
| 346 | Samuel Frank | .54 | | 969-2813 |
| | Ingeborg Friedmann | .80 | | 476-2506 |
| 353 | ★ Dr Beulah D Jones | .76 | | 963-9010 |
| | **CULVER** | | | |
| 372 | Jason C C Lu | .75 | | 423-7920 |
| 376 | Anthony Cristiano | .71 | | 969-0330 |
| | John A Rattenni | .73 | | 476-5505 |
| | H Spiak | | – | 969-3239 |

## HAWTHORNE AVE

**1981** Cole Publications

| | | | | |
|---|---|---|---|---|
| 314 | Esther Jacobson | .73 | | 963-7248 |
| | Arthur Roth | .73 | | 963-4253 |
| 322 | Mrs Iris Forcucci | .71 | | 476-6686 |
| 324 | John Toneske | .64 | | 963-8829 |
| 326 | Paul V Colanery | .77 | | 963-5210 |
| | Roman Podolak | .79 | | 963-7149 |
| 330 | Jose Pereira | .76 | | 968-4786 |
| 331 | Roger Wszolek | .75 | | 965-4765 |
| 332 | Nicholas Vito | .74 | | 423-0128 |
| 336 | Patsy Borrelli | | | 968-7918 |
| | J Collins | .79 | | 423-9627 |
| | Louise Kellegrew | .67 | | 423-2025 |
| 338 | Charles Ciero | | | 969-5351 |
| | C ORourke | .77 | | 968-2744 |
| 339 | Leonard B Goldman | .68 | | 476-5154 |
| | James Hayden | | ¤ | 423-4512 |
| 340 | Cath Reilly | | | 476-0987 |
| 343 | Wadi Dahdal | .74 | | 476-5571 |
| | Wadi Dahdal | .74 | | 968-8887 |
| 346 | Samuel Frank | | | 969-2813 |
| | Ingeborg Friedmann | | ¤ | 476-2506 |
| 353 | ★ Dr Beulah D Jones | | | 963-9010 |
| | **CULVER** | | | |
| 372 | D Canner | .78 | | 965-6368 |
| | A Kamsler | .78 | | 965-6368 |
| | Jason C C Lu | .75 | | 423-7920 |
| 376 | Anthony Cristiano | .71 | | 969-0330 |
| | C Rattenni | .65 | | 968-4044 |
| | John A Rattenni | .73 | | 476-5505 |

## HAWTHORNE AVE

**1977** Cole Publications

| | | | |
|---|---|---|---|
| 314 | Esther Jacobson | 3 | 963-7248 |
| | Arthur Roth | 3 | 963-4253 |
| 322 | Mrs Iris Forcucci | 1 | 476-6686 |
| 324 | John Toneske | | 963-8829 |
| 326 | | NP | |
| 330 | Jose Pereira | – | 968-4786 |
| 331 | Roger Wszolek | 5 | YO5-4765 |
| 332 | Nicholas Vito | 4 | 423-0128 |
| 336 | Patsy Borrelli | | YO8-7918 |
| | Louise Kellegrew | 7 | 423-2025 |
| | Patsy Purchia | | YO3-2928 |
| 339 | Leonard B Goldman | 8 | 476-5154 |
| | Mrs Cath Lambe | ¤ | 476-7815 |
| 340 | Cath Reilly | | GR6-0987 |
| 343 | Wadi Dahdal | 4 | 476-5571 |
| | Wadi Dahdal | 4 | 968-8887 |
| | Jamil Shaggura | 5 | 965-9363 |

# FINDINGS

## HAWTHORNE AVE

**1977** (cont.) Cole Publications

346 L Bouchard ¤ 963-8902
Sidney Eisenberg YO5-4044
Samuel Frank YO9-2813
353 ★Dr Beulah D Jones – 963-9010
CULVER
372 Harold Campbell 5 969-0290
Jason C C Lu 5 423-7920
376 Anthony Cristiano 1 969-0330
Frank P Rattenni 968-4044
John A Rattenni 3 476-5505

## HAWTHORNE AVE

**1972** Cole Publications

314 FRANK GOLDBERG YO94229
HERMAN HOLZWASSER GR64718
MRS C I WHITTARD YO33413

322 MRS IRIS FORCUCCI ¤4766686
324 JOHN TONESKE 4 9638829

330 SIDNEY J HOFFMAN YO87919
331 WALTER M WSZOLEK YO54765
332 JERRY CONIGLIO 4 GR61348
JOHN FEYTI 5 4765552

336 PATSY BORRELLI YO87918
LOUISE KELLEGREW 7 4232025
PATSY PURCHIA YO32928

338 CHARLES CIERO YO95351
FRANK OROURKE ¤9682744
339 LEONARD B GOLDMAN8 4765154
MRS JAMES J LARKE7 9639731
JOANNE LARKE 9637413
ROSEMARY LARKE 9637413
340 JOSEPH D CETRONE 0 4238030
D MCCARRON 7 9655951
CATH REILLY GR60987
343 DOROTHY R TOBIN 9636139
JDG JOHN E TOBIN YO34442
JOSEPH J TOBIN 9636139
346 SIDNEY EISENBERG YO54044
SAMUEL FRANK YO92813
353 DR JEROME W ENGLE YO30210
•• CULVER ••
372 J B LEWANCAWICK 9695741
BEVERLY NYAHAY 9698094
JOSEPH NYAHAY 6 YO32362
376 ANTHONY CRISTIANO ¤9690330
FRANK P RATTENNI 5 9684044

## HAWTHORNE AVE

**1967** New York Telephone Co

314 Goldberg Frank ----------YOnkrs 9-4229
314 Holzwasser Herman ----------GRnlf 6-4718
314 Whittard Clara I Mrs ---------YOnkrs 3-3413

322 Gluck Benj ----------YOnkrs 9-4107
324 Toneske John ----------963-8829
325 Rochlin A S Dr ----------YOnkrs 9-1862
325 Schwarzstein Jack ----------YOnkrs 3-8110
326 Ginnane Mary V ----------YOnkrs 8-0584
326 Konrad Jos ----------YOnkrs 3-6413

330 Hoffman Sidney J ----------YOnkrs 8-7919
331 Wszolek Walter M ----------YOnkrs 5-4765
332 Coniglio Jerry ----------GR 6-1348
332 Feyti John ----------476-5552

336 Borrelli Patsy ----------YOnkrs 8-7918
336 Kellegrew Louise ----------423-2025
336 Purchia Patsy ----------YOnkrs 3-2928

338 Clero Chas ----------YOnkrs 9-5351
339 Larke Jas J Mrs ----------963-9731
339 Larke Joanne ----------963-7413
339 Larke Rosemary ----------963-7413
339 Marks Gerald D ----------969-3105
340 Ercolani Vincent ----------423-4711
340 McCarron D ----------965-3266
340 Reilly Catherine ----------GRnlf 6-0987
343 Tobin John E Judge ---------YOnkrs 3-4442
343 Tobin Jos J ----------963-6139
346 Eisenberg Sidney ----------YOnkrs 5-4044
346 Frank Saml ----------YOnkrs 9-2813
353 Engle Jerome W ---------MD-YOnkrs 3-0210

***CULVER 360***

372 LeWancawick Josephine B -------969-5741
372 Nyahay Beverly ----------969-8094
372 Nyahay Jos ----------YO 3-2362
376 Messar E ----------476-5416
376 Rattenni Frank P ----------968-4044

## HAWTHORNE AVE

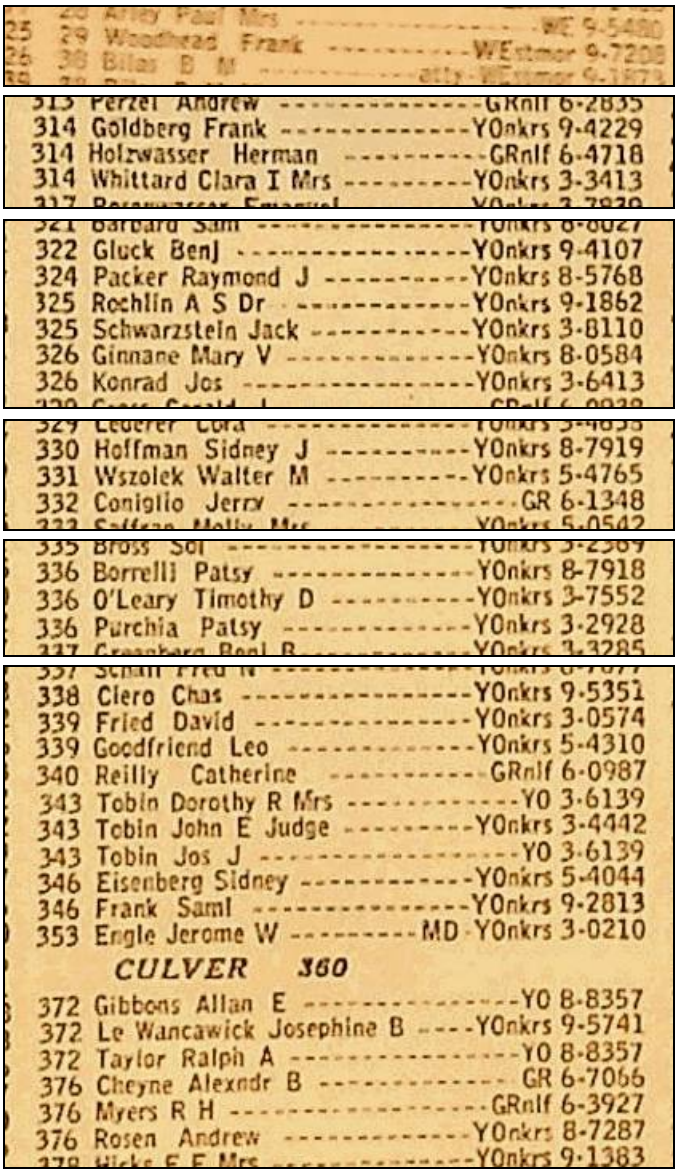
**1965** New york Telephone Company

322 MCCAFLIN DOLORIS

# FINDINGS

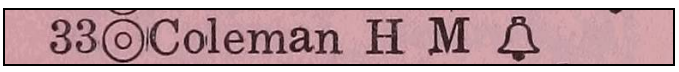
## HAWTHORNE AVE

**1963** New York Telephone Co




## HAWTHORNE AVE

**1962** Price And Lee Co




## HAWTHORNE AVE

**1949** New York Telephone

353 GREENFIELD JOS J DR

## HAWTHORNE AVE

**1940** New York Telephone

353 Greenfield Jos J Dr

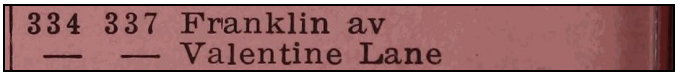
## HAWTHORNE AVE

**1927** Polk Directory Co

343 Beechwood ter
Ashton rd
Culver

## HAWTHORNE AVE

**1924** Richmond Directory Co




## HAWTHORNE AVE

**1919** W L Richmond



# FINDINGS

## LIVINGSTON AVE

**2024** Cole Information

| | |
|---|---|
| 100 | Spence School |
| | LEONA O TORRES |
| | SANDRA L MONROY |
| | SHIRLEY A DAY |
| | CHRISTIAN M COSTA |
| 102 | Amg Cleaning Services |
| | CHRISTIAN URENA |
| | ADRIAN GONZALEZ |
| | MARIA ALVAREZ |
| | MARIA CAMBRA |
| | ALBERTO CRUZ |
| | ANTHONIA MENDEZ |
| 104 | ROSELYN BOWLING |
| | CANDACIE SILCOTT |
| 108 | NIBERKA L FERNANDEZ |
| 110 | WILLIAM STACHOWIAK |
| 112 | MARJORIE A LIPAN |
| | RAHMESHA THOMPSON |
| | ANA L MATEO |
| 116 | ALINA A BUTNARU |
| | THANKAPPEN ACHARY |
| 120 | CHANTA L NICHOLSON |
| | SHERAY PERRY |
| | JOEY ANDERSON |
| 122 | DWIGHT A HAM |
| | SERENA D CHRISTOPHER |
| 124 | LUCILDA TAYLOR |
| | DARLENE E MOORE |
| | RICHARD MERRITT |
| 125 | RACHELLE CAMPOS |
| | ANIESHA FULLER |
| | AUDREY WILTSHIRE |
| | RAMONA PAULA |
| | RAMONITA BREBAN |
| | KENNETH E POTEAT |
| | JUDARRY F THOMAS |
| | UNDIRE RICHARDS |
| | KHALID S GOSHORN |

## LIVINGSTON AVE

**2024** (cont.) Cole Information

| | |
|---|---|
| 125 | PIERRE W GAGNE |
| | TANIA PEREZ |
| | SHAUNA N PATRICK |
| | TAWANDA T EALY |
| | CYNTHIA A GAGNE |
| | DESTINY L MERCADO |

## LIVINGSTON AVE

**2022** Cole Information

| | |
|---|---|
| 100 | Apt 5C Shirley A Day |
| | Apt 3C Christian M Costa |
| | Apt 1B Sandra L Monroy |
| | Apt 4C Rodolfo Garcia |
| | Apt 1C Jermaine Nicks JR |
| | Apt 2C Leona O Torres |
| 102 | Apt 3S Adrian Gonzalez |
| | Apt 2S Alberto Cruz |
| | Apt 2N Christian Urena |
| | Apt 3N Maria Cambra |
| | Apt 1N Maria Alvarez |
| 104 | Apt 1 Roselyn Bowling |
| | Candacie Silcott |
| | Apt 2 Sebastian Francis |
| 108 | Niberka Fernandez |
| 110 | William Stachowiak |
| 112 | Apt 4 Rahmesha Thompson |
| | Apt 3 Marjorie Lipan |
| | Apt 1 Marilud Tovar |
| | Apt 3 Yolonda Greenhaw |
| 116 | Tony John |
| 120 | Chantal L Nicholson |
| 122 | Apt 3 Serena D Christopher |
| | Apt 2 Dwight A Ham |
| | Apt 1 Rhonda Murphy |
| 124 | Apt 2 Lucilda Taylor |

# FINDINGS

## LIVINGSTON AVE

**2022** (cont.) Cole Information

| | |
|---|---|
| 124 | Apt 1 Darlene E Moore |
| | Apt 3 Richard Merritt |
| 125 | Apt 304 Rolonda Green |
| | Apt 305 Destiny L Mercado |
| | Apt 204 Ramonita Breban |
| | Apt 401 Kiana N Goshorn |
| | Apt 403 Tawanda T Ealy |
| | Apt 302 Audrey Wiltshire |
| | Apt 203 Tania Perez |
| | Apt 205 Kenneth E Poteat |
| | Apt 201 Aniesha Fuller |

## LIVINGSTON AVE

**2017** Cole Information

| | |
|---|---|
| 100 | SPENCE SCHOOL |
| | Apt 3C CHRISTIAN M COSTA |
| | Apt 4C RODOLFO GARCIA |
| | Apt 1B HUGO L MONROY |
| | Apt 1C JERMAINE NICKS |
| 102 | AMG CLEANING SERVICES |
| | Apt 3N MARIA J CANTOR |
| | Apt 3S ADRIAN GONZALEZ |
| | ANTONIA MENDEZ |
| | Apt 2N MARIA D URENA |
| 104 | Apt 2 BENJAMIN A BOWLING |
| | Apt 1 CERENE G KELLY |
| | CANDACIE SILCOTT |
| 108 | HEALTHCARE CONSULTING NY LLC |
| | NIBERKA L FERNANDEZ |
| 110 | NORMA CRUZ |
| 112 | Apt 2 KHALED AQEEL |
| | Apt 4 ANA L MATEO |
| | Apt 1 MARILUD TOVAR |
| 116 | RAJESH RAJAN |
| 120 | Apt 2 PERCIVAL A NICHOLSON |

## LIVINGSTON AVE

**2017** (cont.) Cole Information

| | |
|---|---|
| 120 | LARRY THOMAS |
| 122 | Apt 3 VANESSA M PEREZ |
| 124 | KENCY BROWN |
| | Apt 3 RICHARD MERRITT |
| | Apt 1 DARLENE E MOORE |
| | Apt 2 LORI A TAYLOR |
| 125 | Apt 204 RAMONITA BREBAN |
| | E CHARLES |
| | Apt 403 CHARLES EALY |
| | Apt 305 CYNTHIA GAGNE |
| | Apt 304 ROLONDA GREEN |
| | Apt 205 LATASHA A HAMPTON |
| | Apt 405 RAQUEL SUAREZ |
| | Apt 302 AUDREY WILTSHIRE |

## LIVINGSTON AVE

**2014** Cole Information

| | |
|---|---|
| 100 | Apt 1C JERMAINE NICKS |
| | Apt 5C SHIRLEY P GRANT |
| | Apt 3C CHRISTIAN M COSTA |
| 102 | MARIA J CANTOR |
| | ADRIAN S GONZALEZ |
| | ANTONIA MENDEZ |
| | ADRIAN GONZALEZ |
| | Unit 3 VICTOR RIVERA |
| | REINA PEREZ |
| 104 | CANDACIE SILCOTT |
| | Apt 1 JOSEPH A BOWLING |
| | Apt 2 BENJAMIN A BOWLING |
| 108 | EDITH MEDINA |
| 110 | INESFINA DIAZ |
| | NORMA CRUZ |
| 112 | Apt 4 ANA L MATEO |
| | ESHIHADEH AQEEL |
| | Apt 3 YOLONDA GREENHAW |

# FINDINGS

## LIVINGSTON AVE

**2014** (cont.)

Cole Information

| | |
|---|---|
| 112 | Apt 2 SHIAHDEH AQUEEL |
| 116 | RAJAN THANKAPPAN |
| 118 | DOMINGO CRUZ |
| 120 | SHERON L LEWIS |
| | D FRISON |
| | VERONA C ADAMS |
| | PERCIVAL A NICHOLSON |
| | LARRY THOMAS |
| 122 | Apt 1 MELIHA STOECKER |
| | Apt 3 CHRISTOPHER BYRD |
| | Unit 1B BIANCA JUSINO |
| 124 | Apt 1 DARLENE E MOORE |
| | KENCY BROWN |
| | RICHARD MERRITT |
| | Apt 2 LUCILDA J TAYLOR |
| 125 | Apt 305 JOSHUAH PARKER |
| | Apt 303 SHAUNA O PATRICK |
| | Apt 404 JERMAINE D THOMPSON |
| | JACQUELINE ORTIZ |
| | AUDREY WILTSHIRE |
| | Apt 405 RAQUEL SUAREZ |
| | NORMA ROSS |
| | Apt 301 WANDA Y RAMOS |
| | Apt 304 ROLONDA GREEN |
| | Apt 403 CHARLES EALY |
| | Apt 204 RAMONITA BREBAN |
| | IVY JACOB |
| | Apt 201 CALLUM LASCELLES |
| | Apt 205 LATASHA A HAMPTON |

## LIVINGSTON AVE

**2010**

Cole Information

| | |
|---|---|
| 100 | Apt 1C JERMAINE NICKS |
| | RODOLFO GARCIA |
| | Apt 5C SHIRLEY P GRANT |

## LIVINGSTON AVE

**2010** (cont.)

Cole Information

| | |
|---|---|
| 100 | Apt 3C CHRISTIAN M COSTA |
| | Apt 2C ERCILIA MARTINEZ |
| | Apt 1B HUGO MONROY |
| 102 | ANTONIA MENDEZ |
| | MARIA J CANTOR |
| | ANTONIO CAMBRA |
| | Unit C48 VERONICA FARACI |
| | VICTOR ROJAS |
| | CHRISTIAN URENA |
| 104 | Apt 2 SEBASTIAN FRANCIS |
| | Apt 1 BENJAMIN A BOWLING |
| | CANDACIE SILCOTT |
| 108 | ROBINSON FERNANDEZ |
| 110 | JUDITH MARTINEZ |
| 112 | JEANNETTE MATEO |
| | Apt 3 MARJORIE M LIPAN |
| | Apt 2 KHALED AQEEL |
| 118 | DOMINGO CRUZ |
| 120 | SHERON L LEWIS |
| | PERCIVAL A NICHOLSON |
| | D FRISON |
| 122 | CHRISTOPHER BYRD |
| | JAMES G BLOUNT |
| 124 | R TAYLOR |
| | DARLENE MOORE |
| 125 | LAMAR SMITH |
| | Apt 405 RAQUEL SUAREZ |
| | Apt 203 FRANK A LOMBARDO |
| | Apt 301 TAYYIBIH RAMPERSAUD |
| | Apt 303 SHAUNA O PATRICK |
| | Apt 404 JERMAINE D THOMPSON |
| | RAMONITA BREBAN |
| | LINDA BRANCACCIO |
| | Apt 403 TAWANDA EALY |

# FINDINGS

## LIVINGSTON AVE

**2005** Cole Information

| | |
|---|---|
| 100 | NICHOLAS SEDEY |
| | Apt 4C SARAH OWUSU-ANSAH |
| | MARIA D CORNELIO |
| | JUDITH L LUGO |
| | BENITA ARVELO |
| | Apt 5C SHIRLEY P GRANT |
| | Apt 3C ANDRES TEXIDOR |
| 102 | FRANCISCO PEREZ |
| | RAMON URENA |
| | CARLOS GAMERO |
| | B ESCOBAR |
| | ENRIQUE SANCHEZ |
| | V RIVERA |
| 104 | MCD EXPRESS |
| | MDC EXPRESS |
| | CANDACIE SILCOTT |
| | Apt 2 SEBASTIAN FRANCIS |
| | Apt 1 MICHAEL B BOWLING |
| 108 | JORGE BALLINAS |
| 110 | MELINDA AVILA |
| | AMALIA ILAGORRE |
| 112 | NAVAUGHN FIELDS |
| | Apt 2 SHIAHDEH AQUEEL |
| | ANA MATEO |
| 116 | OCCUPANT UNKNOWN |
| 118 | DOMINGO CRUZ |
| 120 | COLLIN MONCRIEFFE |
| | Apt 1 ALBAN MCQUENNIE |
| | C REID |
| | Apt 2 PERCIVAL A NICHOLSON |
| 122 | MELISSA BONILLA |
| | PASHENZZ HAM |
| | MURAD SALAH |
| | DENNIS CROWLEY |
| | Apt 1 M STOECKER |
| 124 | PAUL HARRIS |
| | Apt 2 LUCILDA S TAYLOR |
| | MARIE FALCONER |

## LIVINGSTON AVE

**2005** Data Axle

| | |
|---|---|
| 125 | GALAXY GENERAL CONTRACTING |

## LIVINGSTON AVE

**2000** Cole Information

| | |
|---|---|
| 100 | Apt 3C CHRISTI COSTA |
| | SAADA DEMI |
| 102 | N TORRES |
| | E PEREZ |
| | V RIVERA |
| | JOSE RODRIGUEZ |
| | MARIA URENA |
| | ANTONIO CAMBRA |
| 104 | MIKES LIMOUSINE & CAR SVCE |
| | Apt 1 MICHAEL BOWLING |
| | S FRANCIS |
| 108 | SABAH SAYEGH |
| | S SHLEIWET |
| 110 | DAVID MARTINEZ |
| 112 | OCCUPANT UNKNOWN |
| 116 | THALIA LANGLEY |
| 118 | RUTHLYN WEBSTER |
| 120 | Apt 2 MARK HENDRICKSON |
| 122 | Apt 1 EVA PUCCI |
| | T R ACHARY |
| | Apt 1 P LIBERTY |
| 124 | OCCUPANT UNKNOWN |

## LIVINGSTON AVE

**1995** Cole Information

| | |
|---|---|
| 100 | MAIGA, CHEICKNA |
| | NAVA, MARIA |
| | GORDON, ROBERT |
| 102 | BOBADILLA, JUAN |

# FINDINGS

## LIVINGSTON AVE

**1995** (cont.) Cole Information

| | |
|---|---|
| 102 | CAMBRA, ANTONIO |
| 104 | BOWLING, BENJAMIN ALEXANDER |
| | BOWLING, MICHAEL |
| | BOWLING, C |
| 108 | SHLEIWET, S |
| 112 | WILLIAMS, CHANTRY |
| | AQUEEL, SHIAHDEH |
| | OKANG, GEORGE |
| 124 | FOY, SHERWAN |

## LIVINGSTON AVE

**1992** Cole Information

| | |
|---|---|
| 100 | COGLITORE, THOMAS |
| | GONZALEZ, AUGUSTIN, JR |
| | GORDON, ROBERT |
| 102 | CAMBRA, ANTONIO |
| | BOBADILLA, JUAN |
| | CRUZ, CARMEN |
| | AGUILAR, JUAN |
| 104 | BOWLING, MICHAEL |
| | BOWLING, BENJAMIN ALEXANDER |
| 108 | SHLEIWET, S |
| 112 | AQUEEL, SHIAHDEH |
| | SALIS, MISBAW |
| | BOYE, ISIAH |
| | BOYE, PAULINA |
| 122 | REYES, CARMEN |
| 124 | FISHBURNE, SABINA |

## LIVINGSTON AVE

**1981** Cole Publications

| | | | |
|---|---|---|---|
| 102 | Farhan Nassar Sr | .66 | 423-3651 |
| 104 | T Larsen | | 963-7191 |
| 108 | Edward C Guidice | .77 | 963-5888 |

## LIVINGSTON AVE

**1981** (cont.) Cole Publications

| | | | |
|---|---|---|---|
| | Michael Huska | .62 | 965-5369 |
| 110 | | NP | |
| 112 | Anthony Alfano | .68 | 968-1532 |
| | Reyad Freih | .79 | 963-9454 |
| | Aqeel Shihadeh | .79 | 968-5787 |
| 116★ | Clifford Cook Mvng | | 968-2288 |
| 120 | Lucy Maldoanado | .79 | 968-5304 |

## LIVINGSTON AVE

**1977** Cole Publications

| | | | |
|---|---|---|---|
| 100 | Juan Berisso | 5 | 963-5608 |
| | Mrs Vilma Kerulo | 8 | 969-4194 |
| | Basil Kozier | | YO5-5106 |
| | Mrs L Manriquez | 5 | 423-8723 |
| 102 | Farhan Nassar Sr | | 423-3651 |
| | Jack Nassar | 5 | 968-2404 |
| 104 | Robert K Larsen | | YO3-7191 |

| | | | |
|---|---|---|---|
| 104 | James E ONeill | 5 | 423-9314 |
| 108 | Michael Huska | | YO5-5369 |
| | Richard J Huska | 4 | 423-6471 |
| 110 | Michael Nawalaniec | 9 | 968-3478 |
| 112 | Anthony Alfano | 8 | 968-1532 |
| | Peter J Decarlo | 5 | 423-0891 |
| | Samuel Haddad | ¤ | 476-9390 |
| 116 | | NP | |
| 120 | | NP | |
| 122 | N Viviano | | YO9-3016 |
| 124 | | NP | |

## LIVINGSTON AVE

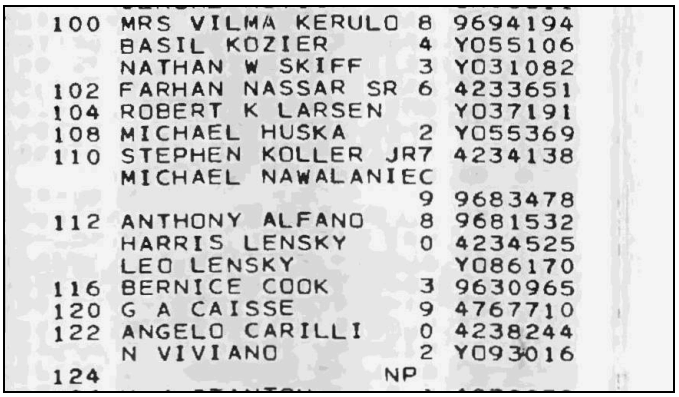
**1976** New york Telephone Company

| | |
|---|---|
| 110 | NY CITY OF EDUCATION CITY BOARD OF HEADQUARTERS OFFICES CHILDREN WITH RETAR |

# FINDINGS

## LIVINGSTON AVE

**1972** Cole Publications



| | | | |
|---|---|---|---|
| 100 | MRS VILMA KERULO | 8 | 9694194 |
| | BASIL KOZIER | 4 | YO55106 |
| | NATHAN W SKIFF | 3 | YO31082 |
| 102 | FARHAN NASSAR SR | 6 | 4233651 |
| 104 | ROBERT K LARSEN | | YO37191 |
| 108 | MICHAEL HUSKA | 2 | YO55369 |
| 110 | STEPHEN KOLLER JR | 7 | 4234138 |
| | MICHAEL NAWALANIEC | | |
| | | 9 | 9683478 |
| 112 | ANTHONY ALFANO | 8 | 9681532 |
| | HARRIS LENSKY | 0 | 4234525 |
| | LEO LENSKY | | YO86170 |
| 116 | BERNICE COOK | 3 | 9630965 |
| 120 | G A CAISSE | 9 | 4767710 |
| 122 | ANGELO CARILLI | 0 | 4238244 |
| | N VIVIANO | 2 | YO93016 |
| 124 | | NP | |

## LIVINGSTON AVE

**1965** New york Telephone Company

| | |
|---|---|
| 110 | SHERMAN TRUCKG |

## LIVINGSTON AVE

**1961** New York Telephone

| | |
|---|---|
| 110 | EDUCATION BOARD OF- |

## LIVINGSTON AVE

**1927** Polk Directory Co

| |
|---|
| 103 Culver |

# FINDINGS

## POST ST

**2024** Cole Information

60 ALAN R GRAY
ELISSA GUZMAN
SUZETTE GONZALEZ
EDWIN J BURGOS
MARIA MEJIA
LESLYE H SAENZ
66 Apt 1 Tilex Telecom Global
CARLTON R JOHNS
68 DONALD CHEATHAM
LANA FIELDS
MICHEL RUIZ
KEISHON T CHAPPELL
70 JOSE CORREA
MARTHA I LOPEZ
ANGELDARIO R GARCIA
74 JOSE I CASTRO
SARA MALDONADO
ALBERTO LOPEZ
76 MICHAEL ORTIZ
MYRTA SANCHEZ
ANTONIO PLASENCIA
MARIBEL URENA
HERMINIO F FERNANDEZ
JESENIA DEJESUS
CARMEN MORENO
FRANCY SOTO
VICTOR COSTA
80 WALTER A BRONFIELD
81 JAMES G EGIZIACO
82 LEONARDO TOVAR
GUADALUPE B TOVAR
WALTER A BRONFIELD
84 LETICIA E MUNOZ
HUGO TORRES
LEODEGARIO RUIZ
FRANCISCA RUIZ
MARIA CARDEC
88 GABRIELA GUTIERREZ

## POST ST

**2024** (cont.) Cole Information

88 ISIDRO GUTIERREZ
JUAN A CARRANZA
BLAANCA L ESPINOZA
JUAN A TIRADO
EVIDANIA URENA
KATHY BLANKENSHIP
TIARA HENRY

## POST ST

**2022** Cole Information

60 Apt 5A Leslye H Saenz
Apt 2B Maria Mejia
Apt 5B Delia E Saenz
Apt 1B Yvette I Sayegh
Apt 2B Esmelin V Rodriguez
Apt 4B Ghassan K Sayegh
Apt 5B Maria E Meza
Apt 2B Joaquin T Burgos
66 Apt 1 Jose L Lucena
68 Apt 2 Keishon T Chappell
Apt 3 Donald Cheatham
Apt 3 Lana Fields
Apt 1 Michel Ruiz
70 Apt 3 Martha I Lopez
Apt 1 Jose Correa
74 Apt 1 Sara Maldonado
Albert Lopez
Jose I Castro
Unit 1 Dimas Vazquez
76 Francy Soto
82 Apt 2 Leonardo Tovar
Apt 1 Walter A Bronfield
Apt 2 Guadalupe B Tovar
84 Apt 2 Francisca F Ruiz
Apt 2 Leodegario F Ruiz

# FINDINGS

## POST ST

**2022** (cont.) Cole Information

84 Apt 1 Leticia E Munoz
88 CARRANZA AUTO REPAIR
Apt 3E Blaanca L Espinoza
Apt 1E Juan A Tirado
Apt 1W Tiara Henry
Apt 2W Isidro Gutierrez
Apt 2E Juan A Carranza
Apt 3W Evidania Urena

## POST ST

**2017** Cole Information

60 Apt 2B CAROL M ARIAS
Apt 5A ALAN GRAY
AMY PEREZ
Apt 5B LESLYE H SAENZ
Apt 1B GHASSAN K SAYEGH
66 Apt 1 MARSHA CUMMINGS
BSMT CARLTON R JOHNS
Apt 2 JACKQUEE A STEPHENSON
70 Apt 1 EDWIN GONZALEZ
74 Apt 2 LUIS O ALVARENGA
Apt 1 ALBERT LOPEZ
76 EMMANUEL A SALDIVAR
80 JOVANNA CASTILLO
81 JAMES G EGIZIACO
JOSEPH MALDONADO
82 ALYCAT INC
Apt 1 WALTER A BRONFIELD
ALISON M GORE
Apt 2 LEONARDO TOVAR
84 Apt 1 CURTIS JONES
CHRISTINE RIVERA
JACKELINE RODRIGUEZ
Apt 2 CLAUDIA N RUIZ
BSMT LEODEGARIO F RUIZ

## POST ST

**2017** (cont.) Cole Information

88 Apt 1W ELIO GORDILLO
HUMBERTO GUTIERREZ
Apt 1E RUBEN GUTIERREZ
Apt 2E MARCOS HERNANDEZ
Apt 3W FELIX R URENA

## POST ST

**2014** Cole Information

60 Apt 5A LEONOR M MEZA
Apt 3A BRIAN MONTALVO
Apt 2B CAROL M ARIAS
Apt 4B LEONIDAS F FLORES
Apt 3B GRACE M HART
AMY PEREZ
Apt 5B LESLYE H SAENZ
66 CLIFFORD PETERS
WANDA M LUCAS
CARLTON R JOHNS
68 Apt 1 MARTHA GOMEZ
Apt 2 KEISHON T CHAPPELL
Apt 3 DONALD E CHEATHAM
Unit B DEIBISON VENTURA
70 BENJAMIN PINEDA
ELIZABETH C RODRIGUEZ
JUANA VASQUEZ
Apt 3 MELISSA LOPEZ
Apt 2 MODESTO CASTRO
74 Unit 1 TAINO GARCIA
FABRICIO MONTES
JONATHAN D BATES
Apt 2 JOSE G ORTIZ
76 EMMANUEL A SALDIVAR
MARIBEL D URENA
80 JOHN SMITH
JOVANNA CASTILLO

# FINDINGS

## POST ST

**2014** (cont.) Cole Information

81 JOSEPH MALDONADO
CARMELA EGIZIACO
CINDI SNYDER
82 Apt 2 LEONARDO TOVAR
Apt 1 WALTER A BRONFIELD
ARZ CAMPOS
84 Apt 1 VICTOR BERMEJO
Apt 2 LEODEGARIO RUIZ
88 Unit 1A DOMINGO A PEREZ
MARCOS HERNANDEZ

## POST ST

**2010** Cole Information

60 JANNE LUNSFORD
Apt 5B JORGE A SAENZ
Apt 2B ANTONIO G CASTILLO
Apt 3B GRACE M HART
Apt 3A COLLETTE DANIELS
66 CLIFFORD PETERS
AUDREY JOHNS
WANDA M LUCAS
68 CLAUDIA N RUIZ
70 Apt 2 MODESTO CASTRO
Apt 3 ANGEL L GARCIA
74 MELANIE ACEVEDO
JOSE G ORTIZ
EFREN SOLIS
76 ARTURO SALDIVAR
Unit 2 KELVIN GONZALEZ
Apt 1 JESENIA D DEJESUS
ISABEL RUINES
DAMARIS PERRONES
MARIBEL URENA
80 WALTER A BRONFIELD
CRUSITA MORALES

## POST ST

**2010** (cont.) Cole Information

81 CINDI SNYDER
TONI A MALDONADO
ANTHONY EGIZIACO
82 JESUS PASTRANA
ULYSSES TOVAR
84 ME & MRS JONES BARBER SHOP
KATHY D JONES
88 JUAN A CARRANZA
MARCOS HERNANDEZ

## POST ST

**2005** Cole Information

60 Unit 104 IAN S GRABEL
Apt 3B NORMAN W HART
TIMOTHY WYNN
ALMENER PATTERSON
MARVIN E TOONE
Apt 4B GHASSAN K SAYEGH
MARIA O MEJIA
OSCAR VELASQUEZ
66 J STEPHENSON
SUSIE M COLEMAN
SHANAYA GILL
Apt 1 LATASHA WILLIAMS
MARIA INOA
68 MILDRED CUBAS
DONALD CHEATHAM
STEPHEN LAMSTEIN
Apt 3 LAMONT SMITH
BRENDA JORDAN
70 TATIANA CANALES
PETER GARCIA
ANA RUIZ
PABLO QIUNONES
PABLO QUINONES

# FINDINGS

## POST ST

**2005** (cont.) Cole Information

74 Apt 2 CARMEN L MALDONADO
EFREN SOLIS
76 CARMEN MORENO
ARTURO SALDIVAR
MARIBEL URENA
Unit 3 CATALINO GONZALEZ
80 OCCUPANT UNKNOWN
81 OCCUPANT UNKNOWN
82 WALTER A BRONFIELD
84 LEODEGARIO F RUIZ
Apt 2 YESENIA BAIZAN
KATRINA K JONES
88 CARRANZA AUTO REPAIR
JUAN A CARRANZA
GERMAN RONDON
ALBERTO TORRES
Unit 1A DOMINGO A PEREZ

## POST ST

**2000** Cole Information

60 Apt 3B STACEY HART
Apt 4B GHASSAN K SAYEGH
Apt 2B MARIA MEJIA
Apt 2A NIURKA DURAN
66 LATASHA WILLIAMS
68 MICAELA BUSTILLO
Apt 1 LAURA MOLINA
70 WELDON BROWN
V PETRUCELU
73 OCCUPANT UNKNOWN
74 Unit 1 NARCISA PAGAN
76 Apt 1 MARISOL PEREZ
80 JOSEFA LIRANZO
81 CARMELA EGIZIACO
82 TOMMY ROPICKI

## POST ST

**2000** (cont.) Cole Information

82 Apt 2 JOSE RIOS
84 HILDA AGUILAR
G TOVAR
88 FELIX G URENA
ALBERTO TORRES
V PEREZ
S SANTAMARIA

## POST ST

**1995** Cole Information

60 HART, G
WILLIAMS, PRESTON
CARTER, SASHA
KEY, VIRGINIA
MEJIA, MARIA
GRABEL, GLADYS
74 OLIMPIO, ANTHONY
JIMENEZ, PHILIP
80 DIAZ, MARTINA
81 EGIZIACO, CARMELA
82 ROPICKI, TOMMY
84 WHITE, GUS
88 ALVARADO, SONIA
BAEZ, H
GUZMAN, ANTONIO
PULEO, FRANK
TORRES, ALBERTO

## POST ST

**1992** Cole Information

60 MEJIA, MARIA
LAZARUS, DANIEL R
VIERA, JOE

# FINDINGS

## POST ST

**1992** (cont.) Cole Information

| | |
|---|---|
| 60 | MORALES, RICHARD |
| | GRABEL, GLADYS |
| 66 | RAMOS, ROGELIO |
| 68 | DE WALT, NESHELLA |
| | SERRANO, IRMA |
| 74 | OLIMPIO, ANTHONY |
| | ABRAMOWITZ, MEL |
| 76 | MOREL, CLARIBEL |
| 81 | EGIZIACO, CARMELA |
| 82 | ROPICKI, TOMMY |
| 84 | ESTREMERA, MICHAEL & NANCY |
| 88 | DIAZ, ALFREDO |
| | ALVARADO, SONIA |
| | PULEO, FRANK |
| | ALVARADO, JOSE |
| | GUZMAN, ANTONIO |

## POST ST

**1981** Cole Publications

| | | | |
|---|---|---|---|
| | 60 | Elizabeth Hilerio . . . . . ¤ | 963-6231 |
| | 66 | Mrs Frances Caram . . . . .62 | 963-0234 |
| | | Bob Sterling . . . . . ¤ | 423-1370 |
| | 70 | . . . . . NP | |
| | 74 | Anthony Heitz . . . . . ¤ | 969-6335 |
| | | Anthony Olimpio . . . . . | 968-9218 |
| | | William D Olimpio . . . . . | 968-4713 |
| | 76 | Jaime Hernandez . . . . . .79 | 969-2527 |
| | | Luigi Rutigliano . . . . . .75 | 968-1706 |
| | | John Tortorici . . . . . .69 | 965-6430 |
| | 80 | . . . . . NP | |
| | 81 | Mrs C Egiziaco . . . . . | 968-2142 |
| | 82 | M Poryouness . . . . . .77 | 965-5194 |
| | | Tommy Ropicki . . . . . .64 | 963-0886 |
| | 84 | Charles Mishk . . . . . .68 | 963-9115 |
| | 88 | Pablo D Acosta . . . . . .75 | 476-7339 |
| | | Joseph P Carey . . . . . | 963-8932 |
| | | Antonio Guzman . . . . . .73 | 963-6908 |
| | | E Rodriguez . . . . . .79 | 423-5251 |

## POST ST

**1977** Cole Publications

| | | | |
|---|---|---|---|
| | 60 | Edward C Guidice | YO3-5888 |
| | | Anthony Larocca ¤ | 963-2229 |
| | | C Santos ¤ | 965-7096 |
| | 66 | Mrs Frances Caram | YO3-0234 |
| | | Flora Youhanna 4 | 423-7993 |
| | 68 | James Forde | 963-5487 |
| | | Roberto Garcia 3 | 423-1093 |
| | 70 | A Dilario 4 | 969-5357 |
| | | Leonidas Stamos 5 | 965-3804 |
| | 74 | Anthony Olimpio | 968-9218 |
| | | William D Olimpio | 968-4713 |
| | | L M Wright 0 | 963-2213 |
| | 76 | Luigi Rutigliano 5 | 968-1706 |
| | | John Tortorici 9 | 965-6430 |
| | 80 | Thomas J Devereux | YO3-7179 |
| | 81 | Mrs C Egiziaco | YO8-2142 |
| | | Geno P Egiziaco | YO3-1846 |
| | 82 | Bismark Malick 5 | 968-0067 |
| | | Tommy Ropicki | YO3-0886 |
| | 84 | David E Harsaghy ¤ | 423-9180 |
| | | Charles Mishk 8 | 963-9115 |
| | 88 | Pablo D Acosta | 476-7339 |
| | | Samuel Bianchi 5 | 968-5694 |
| | | John Burke 0 | 476-4519 |
| | | Joseph P Carey | 963-8932 |
| | | Ramon Estevez | 963-9372 |
| | | Antonio Guzman 3 | 963-6908 |

## POST ST

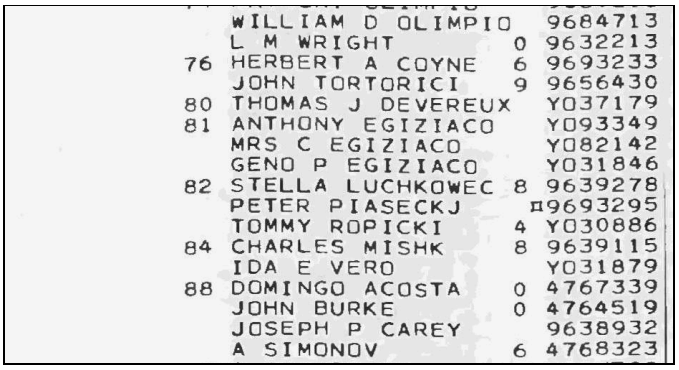
**1972** Cole Publications

| | | | |
|---|---|---|---|
| | 60 | RICHARD BRUNDAGE | YO80116 |
| | | JOHN CANNING | YO35396 |
| | | EDWARD C GUIDICE | YO35888 |
| | | MRS OLGA HAVRILAK3 | YO35109 |
| | | JOHN E KORENKO | 9636380 |
| | | A LAROCCA 9 | 9651498 |
| | 60 | AGUSTIN TORRES 0 | 4236283 |
| | 66 | MRS FRANCES CARAM2 | YO30234 |
| | | PETROS M SIMONOFF6 | 4233967 |
| | 68 | JAMES FORDE 6 | 9635487 |
| | | ALBERTO GARCIA 8 | 4231093 |
| | | SAMUEL NASSAR | ¤4761183 |
| | 70 | MORTON FEURSTEIN | YO83692 |
| | | HENRY FINGER | YO81091 |
| | | BERTOLD KEIL 8 | 9680981 |
| | 74 | ANTHONY OLIMPIO | 9689218 |

# FINDINGS

## POST ST

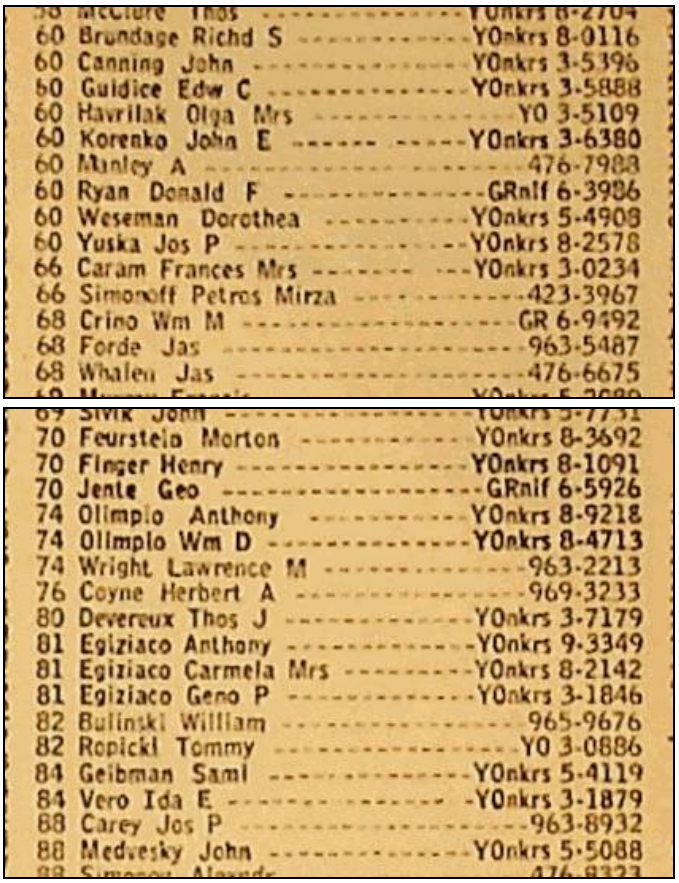
**1972** (cont.) Cole Publications



| | | | |
|---|---|---|---|
| | WILLIAM D OLIMPIO | | 9684713 |
| | L M WRIGHT | 0 | 9632213 |
| 76 | HERBERT A COYNE | 6 | 9693233 |
| | JOHN TORTORICI | 9 | 9656430 |
| 80 | THOMAS J DEVEREUX | | Y037179 |
| 81 | ANTHONY EGIZIACO | | Y093349 |
| | MRS C EGIZIACO | | Y082142 |
| | GENO P EGIZIACO | | Y031846 |
| 82 | STELLA LUCHKOWEC | 8 | 9639278 |
| | PETER PIASECKJ | | 9693295 |
| | TOMMY ROPICKI | 4 | Y030886 |
| 84 | CHARLES MISHK | 8 | 9639115 |
| | IDA E VERO | | Y031879 |
| 88 | DOMINGO ACOSTA | 0 | 4767339 |
| | JOHN BURKE | 0 | 4764519 |
| | JOSEPH P CAREY | | 9638932 |
| | A SIMONOV | 6 | 4768323 |

## POST ST

**1967** New York Telephone Co



| | | |
|---|---|---|
| 60 | Brundage Richd S | YOnkrs 8-0116 |
| 60 | Canning John | YOnkrs 3-5396 |
| 60 | Guidice Edw C | YOnkrs 3-5888 |
| 60 | Havrilak Olga Mrs | YO 3-5109 |
| 60 | Korenko John E | YOnkrs 3-6380 |
| 60 | Manley A | 476-7988 |
| 60 | Ryan Donald F | GRnlf 6-3986 |
| 60 | Weseman Dorothea | YOnkrs 5-4908 |
| 60 | Yuska Jos P | YOnkrs 8-2578 |
| 66 | Caram Frances Mrs | YOnkrs 3-0234 |
| 66 | Simonoff Petros Mirza | 423-3967 |
| 68 | Crino Wm M | GR 6-9492 |
| 68 | Forde Jas | 963-5487 |
| 68 | Whalen Jas | 476-6675 |
| 70 | Feurstein Morton | YOnkrs 8-3692 |
| 70 | Finger Henry | YOnkrs 8-1091 |
| 70 | Jente Geo | GRnlf 6-5926 |
| 74 | Olimpio Anthony | YOnkrs 8-9218 |
| 74 | Olimpio Wm D | YOnkrs 8-4713 |
| 74 | Wright Lawrence M | 963-2213 |
| 76 | Coyne Herbert A | 969-3233 |
| 80 | Devereux Thos J | YOnkrs 3-7179 |
| 81 | Egiziaco Anthony | YOnkrs 9-3349 |
| 81 | Egiziaco Carmela Mrs | YOnkrs 8-2142 |
| 81 | Egiziaco Geno P | YOnkrs 3-1846 |
| 82 | Bulinski William | 965-9676 |
| 82 | Ropicki Tommy | YO 3-0886 |
| 84 | Geibman Saml | YOnkrs 5-4119 |
| 84 | Vero Ida E | YOnkrs 3-1879 |
| 88 | Carey Jos P | 963-8932 |
| 88 | Medvesky John | YOnkrs 5-5088 |

## POST ST

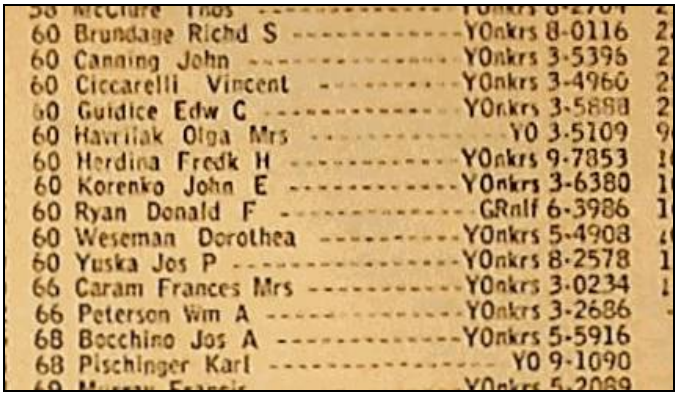
**1967** (cont.) New York Telephone Co



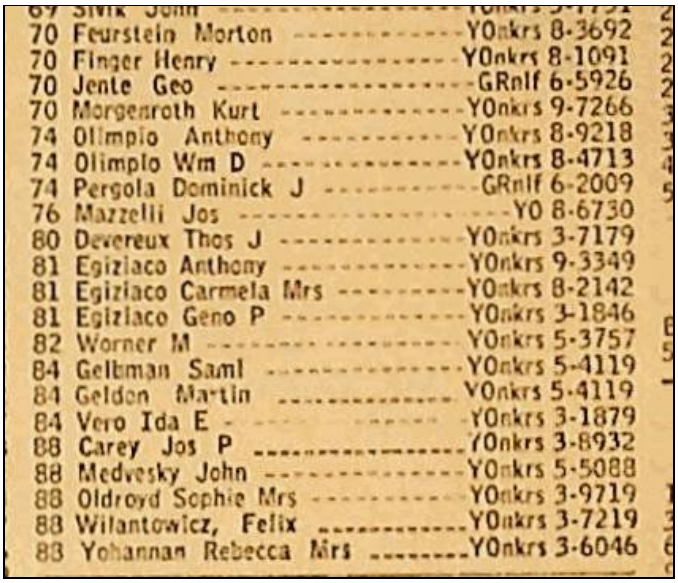
| | | |
|---|---|---|
| 88 | Simonov Alexndr | 476-8323 |

## POST ST

**1963** New York Telephone Co



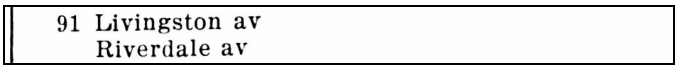
| | | |
|---|---|---|
| 60 | Brundage Richd S | YOnkrs 8-0116 |
| 60 | Canning John | YOnkrs 3-5396 |
| 60 | Ciccarelli Vincent | YOnkrs 3-4960 |
| 60 | Guidice Edw C | YOnkrs 3-5888 |
| 60 | Havrilak Olga Mrs | YO 3-5109 |
| 60 | Herdina Fredk H | YOnkrs 9-7853 |
| 60 | Korenko John E | YOnkrs 3-6380 |
| 60 | Ryan Donald F | GRnlf 6-3986 |
| 60 | Weseman Dorothea | YOnkrs 5-4908 |
| 60 | Yuska Jos P | YOnkrs 8-2578 |
| 66 | Caram Frances Mrs | YOnkrs 3-0234 |
| 66 | Peterson Wm A | YOnkrs 3-2686 |
| 68 | Bocchino Jos A | YOnkrs 5-5916 |
| 68 | Pischinger Karl | YO 9-1090 |



| | | |
|---|---|---|
| 70 | Feurstein Morton | YOnkrs 8-3692 |
| 70 | Finger Henry | YOnkrs 8-1091 |
| 70 | Jente Geo | GRnlf 6-5926 |
| 70 | Morgenroth Kurt | YOnkrs 9-7266 |
| 74 | Olimpio Anthony | YOnkrs 8-9218 |
| 74 | Olimpio Wm D | YOnkrs 8-4713 |
| 74 | Pergola Dominick J | GRnlf 6-2009 |
| 76 | Mazzelli Jos | YO 8-6730 |
| 80 | Devereux Thos J | YOnkrs 3-7179 |
| 81 | Egiziaco Anthony | YOnkrs 9-3349 |
| 81 | Egiziaco Carmela Mrs | YOnkrs 8-2142 |
| 81 | Egiziaco Geno P | YOnkrs 3-1846 |
| 82 | Worner M | YOnkrs 5-3757 |
| 84 | Geibman Saml | YOnkrs 5-4119 |
| 84 | Geldon Martin | YOnkrs 5-4119 |
| 84 | Vero Ida E | YOnkrs 3-1879 |
| 88 | Carey Jos P | YOnkrs 3-8932 |
| 88 | Medvesky John | YOnkrs 5-5088 |
| 88 | Oldroyd Sophie Mrs | YOnkrs 3-9719 |
| 88 | Wilantowicz, Felix | YOnkrs 3-7219 |
| 88 | Yohannan Rebecca Mrs | YOnkrs 3-6046 |

## POST ST

**1927** Polk Directory Co



91 Livingston av
Riverdale av

# FINDINGS

## PURSER PL

**2024** Cole Information

| | |
|---|---|
| 38 | ALBERT TARAFA |
| | CELIA CASTRO |
| | NERISSA THOMAS |
| | DANIQUA S JACOBS |
| | YESENIA SALAS |
| | JOSE M RAMOS |
| | RUBEN ANTOINE |
| | NOEL R RAMIREZ |
| 40 | MYTIA MUCKELVANEY |
| | SERGIO REQUEZ |
| | TYRONE W CRUZ |
| | SONIA A RIVERA |
| | WILFREDO SALAS |
| | NATALIA DIAZ |
| 41 | SHASETY D AVILA |
| | YAZMIN FABIAN |
| | ARIANA N BONILLA |
| 42 | DAQUAWN PATRICK |
| | ROBERTA BINYARD |
| | MILENA MARTINEZ |
| | KRYSTAL R STOVALL |
| | MAGDALENA E POLANCO |
| | ANGELICA RODRIGUEZ |
| | LETTECIA LOPEZ |
| 46 | DENISE J GILLIAM |
| | SHAUN NEWMAN |
| 48 | JUSTIN P SMITH |
| 50 | HILDA MELENDEZ |
| | JOSE SOTO |
| 52 | All Star Mech Ac & Htg Llc |
| | NATHALY DIAZ |
| 95 | Gustavo Ramirez |
| | MADELINE RAMIREZ |
| 96 | YESENIA ANAYA |
| | Ana Castillo |
| | JOSE B JURADO |
| | VOLTAIRE R CORDERO |
| | JEFFREY A MARROQUIN |

## PURSER PL

**2024** (cont.) Cole Information

| | |
|---|---|
| 96 | ELMO R ANDERSON |
| | ROBERTO A AVALOS |
| | TOMASA MORENO |
| | MARINA I MAZA |
| | KATHERINE E MAYORGA |
| | Edwin L Lanza |
| 104 | IVETTE A YAPOR |
| | NAKASSA TARAWARLY |
| | MARIBEL OLIVERAS |
| | CHRISTOPHER LAVIN |
| | YASMINE SYDNOR |

## PURSER PL

**2022** Cole Information

| | |
|---|---|
| 37 | Joe Bonito |
| 38 | Apt 1 Nerissa Thomas |
| | Apt 3 Qwanza Ryan |
| | Apt 3 Jose M Ramos |
| | Apt 2 Eric Tarafa |
| 40 | Apt 1 John Zarcone |
| | Apt 3 Tyrone Cruz |
| | Apt 1 Wilfredo Salas |
| | Apt 2 Natalia Diaz |
| 41 | Apt 3 Indira Bonilla |
| | Apt 3 Ariana N Alvarado Bonilla |
| | Apt R Shasety Avila |
| | Apt 2L Twyann Vaughn |
| 42 | Apt 1 Timika J Floyd |
| | Apt 3 Lettecia Lopez |
| | Apt 2 Milena Martinez |
| | Apt 3 Roberta Binyard |
| | Apt 3 Michael A Sanchez |
| 46 | Apt 1 MacArthur Wade |
| 48 | Apt 1 Sherlon R Quarless |
| | Apt 2 Tanisha S Kirkland |

# FINDINGS

## PURSER PL

**2022** (cont.) Cole Information

| | |
|---|---|
| 95 | Gustavo Ramirez |
| 96 | Apt 4 Katherine E Mayorga |
| | Apt 2 Jose B Jurado |
| | Apt 5 Jeffrey A Marroquin |
| | Apt 6 Edwin L Lanza |
| | Apt 5 Marina I Maza |
| | Apt 5 Roberto A Avalos |
| | Apt 4 Tomasa Moreno |
| | Apt 4 Kendell Ross |
| | Apt B2 Elmo R Anderson |
| | Apt 1 Francisco E Hernandez |
| | Apt 4 Maria M Marroguin-Castellanos |
| 99 | Edward Pages |
| 104 | Apt 1S Pamela M Lewis |
| | Apt 2S Maribel Oliveras |
| | Apt 1N Nakassa Tarawarly |
| | Apt 1S Ivette A Yapor |
| | Apt 2N Yasmine Sydnor |
| | Apt A Christopher Lavin |
| | Apt 1S Gifty Duodu |

## PURSER PL

**2017** Cole Information

| | |
|---|---|
| 37 | JOE BONITO |
| 38 | Apt 1 RUBEN D ANTOINE |
| | SHANTEL CARTER |
| | CARMEN MOYA |
| | Apt 2 ALBERT TARAFA |
| 40 | SHANNON CROCKETT |
| | Apt 2 NATALIA DIAZ |
| | Apt 3 MYTIA MUCKELVANEY |
| | Apt 1 SHERLY WILLIAMS |
| 41 | Apt R SHASETY D AVILA |
| | Apt 3 INDIRA BONILLA |
| | MICHELLE MORENO |

## PURSER PL

**2017** (cont.) Cole Information

| | |
|---|---|
| 42 | Apt 3 RIGOBERTO A CANO |
| | Apt 2 MILENA MARTINEZ |
| | SANIYA MCNEAL |
| | Apt 1 TYMAIN R MONTGOMERY |
| | DAQUAWN PATRICK |
| | BSMT ARTHUR WHITE |
| 44 | JOSEPH GONZALEZ |
| 46 | DENISE J GILLIAM |
| | Apt 1 FLORENCE D KERSON |
| | MACARTHUR WADE |
| 48 | Apt 1 DESMOND D QUARLESS |
| 50 | LISSETTE SOTO |
| 95 | GABRIEL M ETIENNE |
| 96 | Apt 2 JOSE V CASTILLO |
| | Apt 4 NORA FUENTES |
| | Apt 3 OSCAR GARCIA |
| | Apt 6 LUIS A LANZA |
| | RAUL E MENA |
| 99 | EDWARD L PAGES |
| 104 | Apt 2N DOMINIQUE CARTER |
| | Apt 2S NINOTCHKA OLIVERAS |
| | Apt 1N LISA TERRACCIANO |

## PURSER PL

**2017** Data Axle

| | |
|---|---|
| 58 | FUNTIME AMUSEMENTS INC |

## PURSER PL

**2014** Cole Information

| | |
|---|---|
| 37 | JOE BONITO |
| 38 | SHANTEL CARTER |
| | Apt 3 AUBREY BERRY |
| | CARMEN MOYA |

# FINDINGS

## PURSER PL

**2014** (cont.)

| | Cole Information |
|---|---|
| 38 | DANIQUA JACOBS |
| | Apt 1 NERISSA A THOMAS |
| | Apt 2 JONATHAN J VIVANCO |
| 40 | Apt 1 JOHN P ZARCONE |
| | WILFREDO SALAS |
| | Apt 2 VINA WEBB |
| | Apt 3 SHIRLEY WILLIAMS |
| 41 | Apt 3 DANI B RAMIREZ |
| | Apt R SHASETY D AVILA |
| 42 | Apt 1 RHIANNA N HARRIS |
| | Apt 3 SCOTT A HILTZ |
| | SANIYA MCNEAL |
| | MICHELE PATRICK |
| 44 | OCCUPANT UNKNOWN |
| 46 | MACARTHUR WADE |
| | SHAUN NEWMAN |
| | FLORENCE KERSON |
| | WADE MACARTHUR |
| 48 | DESMOND D QUARLESS |
| 50 | JOSE A SOTO |
| 95 | GABRIEL M ETIENNE |
| 96 | Apt 6 LUIS A LANZA |
| | RAUL E MENA |
| | Apt 2 JOHAN CASTILLO |
| | Apt 4 JULIA MARROQUIN |
| | Apt 1 ANA D HERNANDEZ |
| | Unit B CASTILLO JOSE |
| | Unit 1075 JASON QUINONES |
| 99 | EDWARD L PAGES |
| 104 | EDWIN OLIVERAS |
| | LISA TERRACCIANO |
| | WILMA PENA |
| | Apt A ANDREW R BRESKA |
| | GIFTY DUODU |

## PURSER PL

**2010**

| | Cole Information |
|---|---|
| 37 | LEILA O ACOSTA |
| 38 | Apt 3 NATALIA DIAZ |
| | Apt 2 KARLYN STEPHENS |
| | Apt 1 CHRISTIAN CARTER |
| 40 | PEDRO AQUINO |
| 41 | SHAHZAD T BRICE |
| | TWYANN VAUGHN |
| | JAVIER LOPEZ |
| 42 | MICHELE PATRICK |
| | ANFERNEE FLOYD |
| 44 | OCCUPANT UNKNOWN |
| 46 | OCCUPANT UNKNOWN |
| 48 | LUIGI AQUINO |
| 95 | OCCUPANT UNKNOWN |
| 96 | ANDRADE CANDO |
| | Apt B2 YESENIA V MARTINEZ |
| | Apt 4 JULIA MARROQUIN |
| | RAUL E MENA |
| 99 | OCCUPANT UNKNOWN |
| 104 | ROSA BANNISTER |
| | SHANNEN SYDNOR |
| | PAUL JONES |
| | MARIBEL OLIVERAS |
| | CLARISOL YAPOR |
| | Apt A ANDREW R BRESKA |
| | KENNETH RIVERA |
| | Unit 2 BURT C RICHARDSON |

## PURSER PL

**2005**

| | Cole Information |
|---|---|
| 37 | OCCUPANT UNKNOWN |
| 38 | Y MARCANO |
| | STEVEN RIVERA |
| | TERRI ROBERSON |
| | JEANETTE MURRAY |

# FINDINGS

## PURSER PL

**2005** (cont.) Cole Information

| | |
|---|---|
| 38 | JEFFREY LEWIS |
| | KATHLEEN MEDINA |
| | CELIS DIAZ |
| | LOUIS M PAPALEO |
| | YESMIN TARTAK |
| 40 | QIANA HILL |
| | GRACE ATKINSON |
| | LUIGI AQUINO |
| | LOUIS PAPALEO |
| | DESTINY COOPER |
| | ISAAC CABALLERO |
| | FRANK AREIZAGA |
| | MARKELL RICHARDSON |
| | CLIFTON SPENCER |
| 41 | QUINTHIA ROBINSON |
| | TWYANN VAUGHN |
| | JAVIER LOPEZ |
| | C MUSGRAVE |
| | SCUDERI WERNER |
| | SHAHZAD T BRICE |
| | ANDRIA EASTERLING |
| | JOHN WILLIAMS |
| 42 | BRUCE LORD |
| 48 | LUIGI AQUINO |
| 95 | GABRIEL M ETIENNE |
| 96 | KENY NUNEZ |
| | MADELINE PEREZ |
| | B KEANE |
| | ANDRADE CANDO |
| | SONIA RODRIQUEZ |
| | Apt 6 NEXY I SEGURA |
| | ERIKA SUAREZ |
| | SULEMA CASTILLO |
| | ROSA CABAN |
| | ANDJELO B LICUL |
| 99 | EDWARD PAGES |
| 104 | ELINDA KEYES |
| | Apt A ANDREW R BRESKA |

## PURSER PL

**2005** (cont.) Cole Information

| | |
|---|---|
| 104 | JEANTY BRUN |
| | P SHUTER |
| | DEBORAH MIRAGLIA |

## PURSER PL

**2000** Cole Information

| | |
|---|---|
| 37 | LUIS JOCSON |
| 38 | OCCUPANT UNKNOWN |
| 40 | RUTH BENDEZU |
| | PAUL DANIELS |
| 41 | C FRANCIS |
| 95 | GABRIEL ETIENNE |
| 96 | RAMON RODRIGUEZ |
| | RALPH MALAVE |
| | LEONOR CORDERO |
| | Unit 3A MIRIAM JURADO |
| | PAUL SEECHARAN |
| | Apt B2 MARIA D SOTO |
| 99 | LOUIS SHOCHAT |
| 104 | P SHUTER |
| | PATRICK KEENAN |

## PURSER PL

**1995** Cole Information

| | |
|---|---|
| 37 | JOCSON, LUIS |
| 38 | KIFFIN, CURTIS |
| | FORD, JAMAWL |
| 40 | SCOTT, MALCOLM F |
| 41 | VARGAS, GABRIEL |
| | BONSU, ANYANG |
| | BONSU, JOHN |
| 95 | ETIENNE, GABRIEL |
| 96 | LICUL, ANDJELO |

# FINDINGS

## PURSER PL

**1995** (cont.) Cole Information

| | |
|---|---|
| 96 | CABAN, ROSA |
| | HIGGS, DERWIN |
| 99 | SHOCHAT, LOUIS |
| 104 | VALDEZ, MIOSOTIS |

## PURSER PL

**1992** Cole Information

| | |
|---|---|
| 37 | SERRANO, LEANA |
| | JOCSON, LUIS |
| 38 | FORD, LETINA |
| | KIFFIN, CURTIS |
| | CHARLES, LAMONT |
| | BLOCK, BRUCE C |
| | CORREA, MARIA |
| 40 | SCOTT, MALCOLM F |
| | O'NEILL, JAMES E |
| 41 | VASQUEZ, RAFAEL |
| | BONSU, ANYANG |
| | THOMAS, JANICE |
| 95 | ETIENNE, GABRIEL |
| 96 | SAAVEDRA, VICTOR |
| | WALSH, JANET |
| 99 | SHOCHAT, LOUIS |

## PURSER PL

**1981** Cole Publications

**115 MORRIS**

| | | | |
|---|---|---|---|
| 37 | Rev Lazar Klein | | 969-5315 |
| 38 | Manuel Delatorre | .74 | 968-5908 |
| | A Gonzalez | .76 | 963-7466 |
| | G Thompson | .79 | 969-2051 |
| 40 | James E ONeill | .77 | 423-9314 |
| | Malcolm F Scott | .71 | 963-6862 |
| 41 | G B Nostrand | .¤ | 963-0703 |

## PURSER PL

**1981** (cont.) Cole Publications

| | | | |
|---|---|---|---|
| | Mrs Nancy Serven | | 969-5760 |
| | Mrs B J Shaefer | | 969-5760 |
| 42 | Marcia Ferreira | .78 | 965-9239 |
| 95 | | .NP | |
| 96 | John L Demarco | .74 | 423-9377 |
| | Jack Diodato | .77 | 963-2175 |
| | John Keane | .75 | 969-1706 |
| | Joseph F Powers | .73 | 963-5741 |
| 99 | Louis Shochat | .70 | 969-7811 |
| 104 | K A Gardner | .75 | 969-7082 |
| | Joseph F Spiegel | .75 | 969-7082 |
| | S Thompson | .78 | 423-3520 |
| | D Torres | .75 | 476-4818 |

## PURSER PL

**1977** Cole Publications

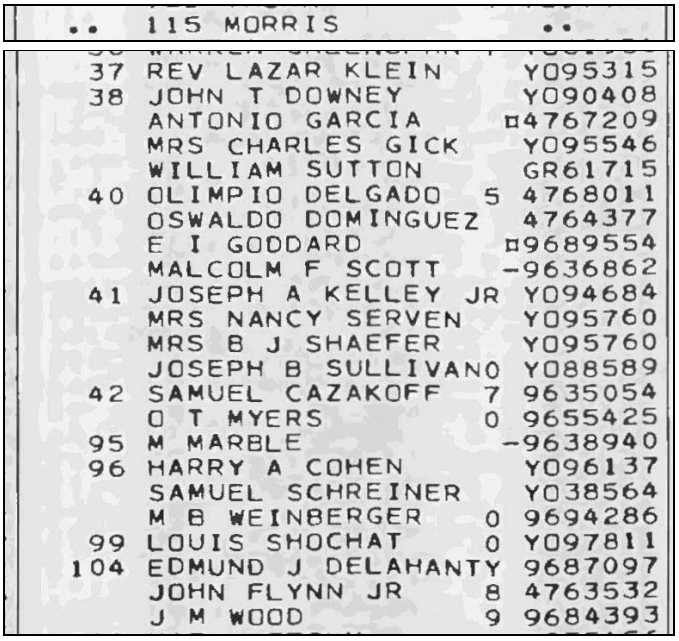
**115 MORRIS**

| | | | |
|---|---|---|---|
| 37 | Rev Lazar Klein | | YO9-5315 |
| 38 | Manuel Delatorre | 4 | 968-5908 |
| | A Gonzalez | ¤ | 963-7466 |
| | Ramon Gonzalez | 3 | 969-4373 |
| 40 | Olimpio Delgado | | 476-8011 |
| | Malcolm F Scott | 1 | 963-6862 |
| | Arthur C Uhrlass | 5 | 963-0716 |
| 41 | Joseph A Kelley Jr | 2 | YO9-4684 |
| | Mrs Nancy Serven | | YO9-5760 |
| | Mrs B J Shaefer | | YO9-5760 |
| 42 | Mrs I Castillo | - | 423-5623 |
| 95 | M Marble | 1 | 963-8940 |
| 96 | John L Demarco | 4 | 423-9377 |
| | John Keane | | 969-0497 |
| | Roger Lennox | ¤ | 423-6024 |
| | Joseph F Powers | 3 | 963-5741 |
| | John Santalone | ¤ | 423-4741 |
| 99 | Louis Shochat | 0 | YO9-7811 |
| 104 | B S Bensal | 4 | 969-0006 |
| | Michael Fuchs | ¤ | 969-6364 |
| | K A Gardner | | 969-7082 |
| | Dale C Nybro | ¤ | 476-9434 |
| | Joseph F Spiegel | 5 | 969-7082 |
| | D Torres | 5 | 476-4818 |

# FINDINGS

## PURSER PL

**1972** Cole Publications

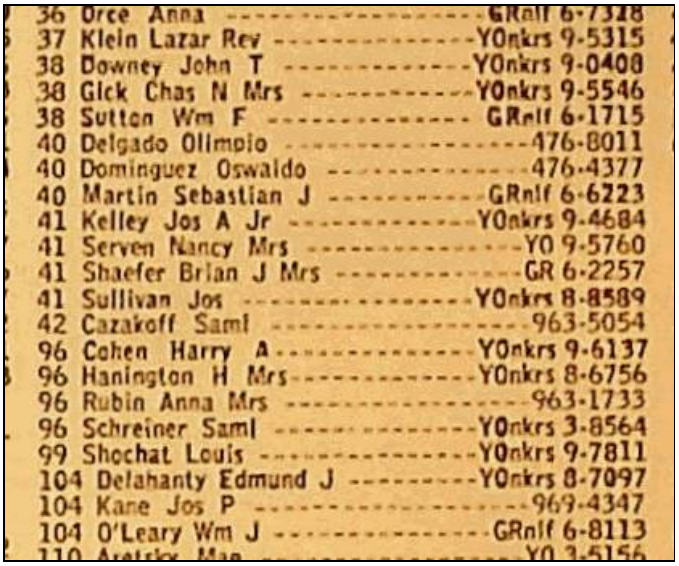


.. 115 MORRIS ..

37 REV LAZAR KLEIN Y095315
38 JOHN T DOWNEY Y090408
ANTONIO GARCIA ¤4767209
MRS CHARLES GICK Y095546
WILLIAM SUTTON GR61715
40 OLIMPIO DELGADO 5 4768011
OSWALDO DOMINGUEZ 4764377
E I GODDARD ¤9689554
MALCOLM F SCOTT -9636862
41 JOSEPH A KELLEY JR Y094684
MRS NANCY SERVEN Y095760
MRS B J SHAEFER Y095760
JOSEPH B SULLIVAN0 Y088589
42 SAMUEL CAZAKOFF 7 9635054
O T MYERS 0 9655425
95 M MARBLE -9638940
96 HARRY A COHEN Y096137
SAMUEL SCHREINER Y038564
M B WEINBERGER 0 9694286
99 LOUIS SHOCHAT 0 Y097811
104 EDMUND J DELAHANTY 9687097
JOHN FLYNN JR 8 4763532
J M WOOD 9 9684393

## PURSER PL

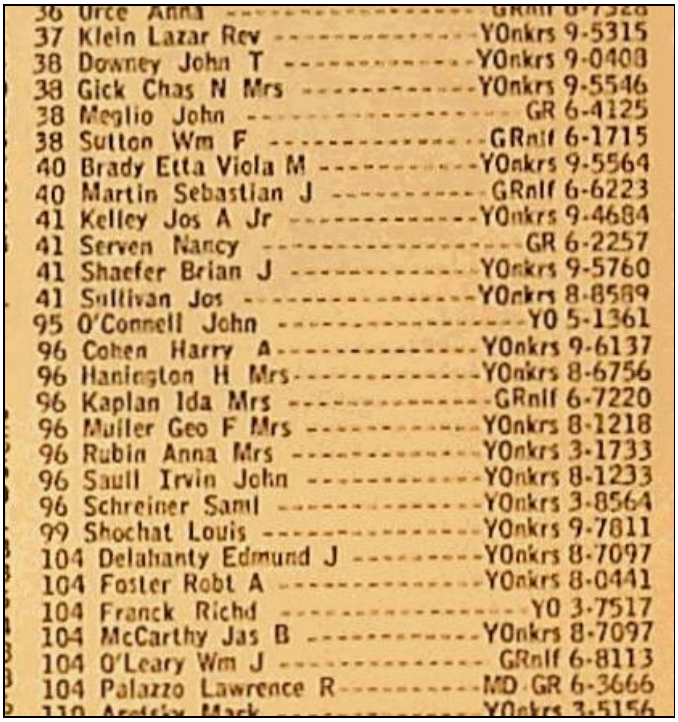
**1967** New York Telephone Co



36 Orce Anna ---------- GRnlf 6-7328
37 Klein Lazar Rev ---------- YOnkrs 9-5315
38 Downey John T ---------- YOnkrs 9-0408
38 Gick Chas N Mrs ---------- YOnkrs 9-5546
38 Sutton Wm F ---------- GRnlf 6-1715
40 Delgado Olimpio ---------- 476-8011
40 Dominguez Oswaldo ---------- 476-4377
40 Martin Sebastian J ---------- GRnlf 6-6223
41 Kelley Jos A Jr ---------- YOnkrs 9-4684
41 Serven Nancy Mrs ---------- YO 9-5760
41 Shaefer Brian J Mrs ---------- GR 6-2257
41 Sullivan Jos ---------- YOnkrs 8-8589
42 Cazakoff Saml ---------- 963-5054
96 Cohen Harry A ---------- YOnkrs 9-6137
96 Hanington H Mrs ---------- YOnkrs 8-6756
96 Rubin Anna Mrs ---------- 963-1733
96 Schreiner Saml ---------- YOnkrs 3-8564
99 Shochat Louis ---------- YOnkrs 9-7811
104 Delahanty Edmund J ---------- YOnkrs 8-7097
104 Kane Jos P ---------- 969-4347
104 O'Leary Wm J ---------- GRnlf 6-8113
110 Aretsiw Mark ---------- YO 3-5156

## PURSER PL

**1963** New York Telephone Co



36 Orce Anna ---------- GRnlf 6-7328
37 Klein Lazar Rev ---------- YOnkrs 9-5315
38 Downey John T ---------- YOnkrs 9-0408
38 Gick Chas N Mrs ---------- YOnkrs 9-5546
38 Meglio John ---------- GR 6-4125
38 Sutton Wm F ---------- GRnlf 6-1715
40 Brady Etta Viola M ---------- YOnkrs 9-5564
40 Martin Sebastian J ---------- GRnlf 6-6223
41 Kelley Jos A Jr ---------- YOnkrs 9-4684
41 Serven Nancy ---------- GR 6-2257
41 Shaefer Brian J ---------- YOnkrs 9-5760
41 Sullivan Jos ---------- YOnkrs 8-8589
95 O'Connell John ---------- YO 5-1361
96 Cohen Harry A ---------- YOnkrs 9-6137
96 Hanington H Mrs ---------- YOnkrs 8-6756
96 Kaplan Ida Mrs ---------- GRnlf 6-7220
96 Muller Geo F Mrs ---------- YOnkrs 8-1218
96 Rubin Anna Mrs ---------- YOnkrs 3-1733
96 Saull Irvin John ---------- YOnkrs 8-1233
96 Schreiner Saml ---------- YOnkrs 3-8564
99 Shochat Louis ---------- YOnkrs 9-7811
104 Delahanty Edmund J ---------- YOnkrs 8-7097
104 Foster Robt A ---------- YOnkrs 8-0441
104 Franck Richd ---------- YO 3-7517
104 McCarthy Jas B ---------- YOnkrs 8-7097
104 O'Leary Wm J ---------- GRnlf 6-8113
104 Palazzo Lawrence R ---------- MD GR 6-3666
110 Aretsiw Mark ---------- YOnkrs 3-5156

# APPENDIX F

**13 Culver St and 372 Riverdale Ave**
372 Riverdale Avenue
Yonkers, NY 10705

Inquiry Number: 8299671.2s
April 01, 2026

# The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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## LIGHTBOX LIVE

Open LightBox Live to access data, tools, and advanced analytics in one online platform.

http://www.web.edrnet.com/ordering/switchboard/login.aspx?s=goto_lightbox&pguid=2CB3387B-7563-4AB3-AF7F-0F923F1DBE67


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| Detail Map | 3 |
| Map Findings Summary | 4 |
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| Government Records Searched/Data Currency Tracking | GR-1 |

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# EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527 - 21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E2247 - 23), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E1528 - 22) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

## TARGET PROPERTY INFORMATION

### ADDRESS

372 RIVERDALE AVENUE
YONKERS, NY 10705

### COORDINATES

| | |
|---|---|
| Latitude (North): | 40.9196520 - 40° 55' 10.74'' |
| Longitude (West): | 73.9005620 - 73° 54' 2.02'' |
| Universal Tranverse Mercator: | Zone 18 |
| UTM X (Meters): | 592579.9 |
| UTM Y (Meters): | 4530208.0 |
| Elevation: | 52 ft. above sea level |

### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

| | |
|---|---|
| Target Property Map: | 50026538 YONKERS, NY |
| Version Date: | 2023 |

### AERIAL PHOTOGRAPHY IN THIS REPORT

| | |
|---|---|
| Photo Year: | 2024 |
| Source: | USDA |

# MAPPED SITES SUMMARY

Target Property Address:
372 RIVERDALE AVENUE
YONKERS, NY 10705

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| A1 | MECHANIC SHOP | 372 RIVERDALE AVE | NY Spills | | TP |
| A2 | 372 RIVERDALE AVENUE | 372 RIVERDALE AVENUE | NY UST | | TP |
| A3 | GOODYEAR AUTO SERVIC | 372 RIVERDALE AVE | RCRA-VSQG, FINDS, ECHO, RI MANIFEST, NY MANIFEST | | TP |
| Reg | HUDSON RIVER PCBS | NO STREET APPLICABLE | NPL, SEMS, RCRA-LQG, US ENG CONTROLS, US INST... | Same | 2048, 0.388, WNW |
| A4 | CON EDISON - EXCAVAT | RIVERDALE AVE AND CU | RCRA NonGen / NLR, NY MANIFEST, NJ MANIFEST | Lower | 61, 0.012, WSW |
| A5 | CON EDISON - TRENCH | RIVERDALE AVE AND CU | RCRA NonGen / NLR, NJ MANIFEST | Lower | 61, 0.012, WSW |
| A6 | LEWIS PROPERTY | 10 CULVER STREET | NY Spills | Higher | 77, 0.015, SSE |
| A7 | NIRAG MANAGEMENT INC | 380 RIVERDALE AVE | EDR Hist Auto | Lower | 96, 0.018, SSW |
| A8 | YONKERS FUEL INC. | 380 RIVERDALE AVENUE | NY UST | Lower | 96, 0.018, SSW |
| A9 | CITGO STATION | 380 RIVERDALE AVE | NY Spills | Lower | 96, 0.018, SSW |
| A10 | CITGO STATION | 380 RIVERDALE AVE | UST FINDER RELEASE | Lower | 96, 0.018, SSW |
| A11 | CONOCO STATION | 380 RIVERDALE AVE | NY Spills | Lower | 96, 0.018, SSW |
| B12 | RIVERDALE AUTO SERVI | 377 RIVERDALE AVE | EDR Hist Auto | Lower | 101, 0.019, West |
| C13 | DEVONSHIRE LANE SERV | 390 RIVERDALE AVENUE | EDR Hist Auto | Higher | 175, 0.033, SSE |
| C14 | SAFEGUARD RIVERDALE | 390 RIVERDALE AVENUE | NY AST, NY Spills, NY SPDES | Higher | 175, 0.033, SSE |
| C15 | DEVONSHIRE LANE SERV | 390 RIVERDALE AVE | RCRA NonGen / NLR, FINDS, ECHO | Higher | 175, 0.033, SSE |
| C16 | DEVONSHIRE 2010 INC. | 390 RIVERDALE AVENUE | NY UST | Higher | 175, 0.033, SSE |
| D17 | YONKERS MUNI.HOUSE A | RIVERDALE AVE & POST | NY Spills | Higher | 190, 0.036, NNW |
| D18 | RIVERDALE AV | AND POST ST | NY Spills | Higher | 205, 0.039, NNW |
| B19 | SPILL NUMBER 9810759 | 96 PURSER PLACE | NY LTANKS | Lower | 248, 0.047, WSW |
| B20 | SPANOS GARAGE | 397 RIVERDALE AVENUE | EDR Hist Auto | Higher | 250, 0.047, SW |
| B21 | TAUB-SILVA RESIDENCE | 104 PURSER PLACE | NY LTANKS | Lower | 273, 0.052, WSW |
| B22 | STUPP | 110 PURSER PLACE | NY LTANKS | Higher | 308, 0.058, SW |
| E23 | FIVE GRAND INC. | 402-404 RIVERDALE AV | NY AST | Higher | 332, 0.063, SSW |
| E24 | CRP RIVERDALE LLC | 402-404 RIVERDALE AV | NY AST | Higher | 332, 0.063, SSW |
| D25 | FLYNN MANNOR | 334 RIVERDALE AVE | NY LTANKS, NY Spills | Higher | 341, 0.065, NNW |
| D26 | JOHN E. FLYNN MANOR | 334 RIVERDALE AVENUE | NY UST | Higher | 341, 0.065, NNW |
| F27 | ROSARIO - UST | 15 CLIFF AVE | NY Spills | Higher | 353, 0.067, East |
| C28 | LIVINGSTON REALTY AS | 145 LIVINGSTON AVE | NY AST | Higher | 367, 0.070, SSE |
| G29 | PEARLS HAWTHORNE SCH | 348 HAWTHORNE AVENUE | NY UST | Lower | 414, 0.078, West |
| G30 | YONKERS PUBLIC SCHOO | 348 HAWTHORNE RD | RCRA NonGen / NLR, NY MANIFEST | Lower | 414, 0.078, West |
| G31 | YONKERS PUBLIC SCHOO | 348 HAWTHORNE AVE | NY LTANKS, NY AST, NY Spills | Lower | 414, 0.078, West |
| H32 | MR RAPICKI | 49 CLIFF AVE | NY Spills | Higher | 432, 0.082, SE |
| G33 | FORECLOSER - UST | 56 CULVER ST | NY Spills | Lower | 433, 0.082, WSW |
| G34 | BATISTA - TTF | 56 CULVER ST | NY LTANKS | Lower | 433, 0.082, WSW |
| E35 | APARTMENT BUILDING | 163 RADFORD STREET | NY AST | Higher | 445, 0.084, South |
| E36 | 167-171 RADFORD STRE | 167-171 RADFORD STRE | NY AST | Higher | 453, 0.086, South |
| E37 | PRIVATE RESIDENCE | 159 RADFORD STREET | NY Spills | Higher | 453, 0.086, South |
| E38 | 159 RADFORD LLC | 159 RADFORD STREET | NY AST | Higher | 453, 0.086, South |

MAPPED SITES SUMMARY

Target Property Address:
372 RIVERDALE AVENUE
YONKERS, NY 10705

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| I39 | 145 RS LLC | 145 RADFORD STREET | NY AST | Higher | 504, 0.095, SSE |
| E40 | MANHOLE 450 | RADFORD ST / SO. BRO | NY Spills | Higher | 505, 0.096, SSW |
| E41 | 14 BAYLEY ASSOCIATES | 14 BAYLEY AVENUE | NY UST | Higher | 509, 0.096, SW |
| E42 | PC PLUMBING | 14 BAYLEY AVE | NY Spills | Higher | 509, 0.096, SW |
| E43 | RED CAP DRIVE IN CLE | 417 RIVERDALE AVE | EDR Hist Cleaner | Higher | 509, 0.096, SSW |
| H44 | CON ED | 42 CLIFF AVE & RADFO | NY MANIFEST | Higher | 513, 0.097, ESE |
| H45 | CON EDISON | 42 CLIFF AVE & RADFO | RCRA NonGen / NLR, FINDS, ECHO | Higher | 513, 0.097, ESE |
| H46 | CON EDISON | 42 CLIFF AVE & RADFO | NJ MANIFEST | Higher | 513, 0.097, ESE |
| H47 | CON EDISON | 42 CLIFF AVE & RADFO | RCRA NonGen / NLR | Higher | 513, 0.097, ESE |
| J48 | ACCURATE PLASTICS | 18 MORRIS PALCE | NY LTANKS | Higher | 525, 0.099, NE |
| J49 | ACCURATE PLASTICS IN | 18 MORRIS PLACE | PFAS ECHO | Higher | 525, 0.099, NE |
| J50 | ACCURATE PLASTICS, I | 18 MORRIS PLACE | NY UST | Higher | 525, 0.099, NE |
| J51 | ACCURATE PLASTICS IN | 18 MORRIS PLACE (AKA | NY Spills | Higher | 525, 0.099, NE |
| F52 | RESIDENTIAL TTF | 38 POST STREET | NY LTANKS | Higher | 528, 0.100, East |
| G53 | YONKERS PUBLIC SCHOO | 350 HAWTHORNE AVE | NY Spills | Lower | 531, 0.101, West |
| H54 | SPILL NUMBER 9812660 | 150 LIVINGSTON AVE | NY LTANKS | Higher | 533, 0.101, SSE |
| E55 | REAL ESTATE TTF | 1 GRAY PLACE | NY LTANKS | Higher | 541, 0.102, South |
| F56 | CON EDISON TRANSFORM | POST ST & HAMILTON A | RCRA NonGen / NLR | Higher | 566, 0.107, ENE |
| F57 | CON EDISON | W S HAMILTON AVE & P | NY MANIFEST | Higher | 566, 0.107, ENE |
| F58 | TM 1100 | HAMILTON AVE & POST | NY Spills | Higher | 566, 0.107, ENE |
| H59 | WALKER - UST | 63 CLIFF AVE | NY Spills | Higher | 572, 0.108, SSE |
| K60 | COSMETIC CAR CARE IN | 320 RIVERDALE AVE | NY Spills, RCRA NonGen / NLR, US AIRS, FINDS,... | Higher | 572, 0.108, North |
| L61 | JOB SITE | 416 RIVERDALE AVE | NY Spills | Higher | 612, 0.116, SSW |
| L62 | GAS STATION | 416-418 RIVERDALE AV | NY Spills | Higher | 612, 0.116, SSW |
| L63 | RIVERDALE BP | 416 RIVERDALE AVE. | NY UST | Higher | 612, 0.116, SSW |
| L64 | GAS STATION | 416-418 RIVERDALE AV | UST FINDER RELEASE | Higher | 612, 0.116, SSW |
| L65 | ANSELMO CARL INC | 418 RIVERDALE AVENUE | EDR Hist Auto | Higher | 616, 0.117, SSW |
| I66 | ABOVE GROUND TANK RE | 154 RADFORD AVE | NY Spills | Higher | 619, 0.117, South |
| I67 | 154 RADFORD AVE APT | 154 RADFORD AVENUE | NY AST | Higher | 619, 0.117, South |
| I68 | 154 RADFORD AVE APT | 154 RADFORD AVENUE | NY UST | Higher | 619, 0.117, South |
| M69 | PROFETA | 32 PURSER PLACE | NY Spills | Lower | 650, 0.123, NNW |
| I70 | GRAY PLACE MANAGEMEN | 10 GRAY PLACE | NY AST | Higher | 669, 0.127, South |
| N71 | CON EDISON | RADFORD ST & CLIFF A | NY MANIFEST | Higher | 680, 0.129, SSE |
| N72 | CON EDISON | CLIFF AVE & RADFORD | PA MANIFEST | Higher | 680, 0.129, SSE |
| O73 | CON EDISON | 92 HAMILTON AVE | RCRA NonGen / NLR, FINDS, ECHO | Higher | 686, 0.130, ENE |
| O74 | CON EDISON TRANSFORM | 92 HAMILTON AVE | RCRA NonGen / NLR, NY MANIFEST | Higher | 686, 0.130, ENE |
| O75 | CON EDISON | 92 HAMILTON AVE | NJ MANIFEST | Higher | 686, 0.130, ENE |
| J76 | SAMAN B NEMEH | 69 HAMILTON AVE | NY UST | Higher | 691, 0.131, NE |
| J77 | RESIDENCE | 69 HAMILTON AVE | NY LTANKS | Higher | 691, 0.131, NE |

# MAPPED SITES SUMMARY

Target Property Address:
372 RIVERDALE AVENUE
YONKERS, NY 10705

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| J78 | CON EDISON MANHOLE 1 | 69 HAMILTON AVE FRON | RCRA NonGen / NLR, NJ MANIFEST | Higher | 691, 0.131, NE |
| O79 | POST STREET REVOCABL | 26-30 POST STREET | NY AST | Higher | 695, 0.132, East |
| 80 | DIAZ RESIDENCE | 62 LIVINGSTON AVE | NY LTANKS | Higher | 696, 0.132, NNE |
| P81 | 125 HOLDING LLC | 125 ELLIOTT AVENUE | NY AST | Higher | 698, 0.132, ESE |
| P82 | 125 HOLDING LLC | 125 ELLIOTT AVENUE | NY UST | Higher | 698, 0.132, ESE |
| K83 | DOMINO TRANSPORT SER | 308 RIVERDALE AVE | NY UST | Higher | 709, 0.134, North |
| J84 | GSB HAMILTON LLC | 84-86 HAMILTON AVENU | NY AST | Higher | 714, 0.135, ENE |
| N85 | CON EDISON | 73 CLIFF AVE | NJ MANIFEST | Higher | 718, 0.136, SSE |
| N86 | CON EDISON | 73 CLIFF AVE | RCRA NonGen / NLR | Higher | 718, 0.136, SSE |
| N87 | CON EDISON | 73 CLIFF AVE | NY MANIFEST | Higher | 718, 0.136, SSE |
| M88 | 110 MORRIS STREET | 110 MORRIS STREET | NY AST | Lower | 745, 0.141, NNW |
| J89 | CON EDISON - ELECTRI | 63 HAMILTON AVE | E MANIFEST | Higher | 749, 0.142, NE |
| L90 | 85 SAINT ANDREWS PLA | 85 SAINT ANDREWS PLA | NY AST | Higher | 750, 0.142, South |
| N91 | CON EDISON - COMPANY | 75 CLIFF AVE | E MANIFEST | Higher | 754, 0.143, SSE |
| J92 | P.J. PROPERTIES | 78 HAMILTON AVENUE | NY AST | Higher | 756, 0.143, ENE |
| L93 | 432 RIVERDALE APARTM | 432 RIVERDALE AVENUE | NY AST | Higher | 761, 0.144, SSW |
| L94 | APT BUILDING | 432 RIVERDALE AVE | NY LTANKS | Higher | 761, 0.144, SSW |
| P95 | CONGREGATION KOLLEL | 155-157 ELLIOT AVENU | NY AST | Higher | 761, 0.144, SE |
| P96 | CONGREGATION KOLLEL | 155-157 ELLIOT AVENU | NY UST | Higher | 761, 0.144, SE |
| O97 | CON EDISON SERVICE B | 93 ELLIOT AVE & MORR | RCRA NonGen / NLR, NY MANIFEST | Higher | 778, 0.147, ENE |
| N98 | CON EDISON | 117 RADFORD ST | RCRA NonGen / NLR, FINDS, ECHO | Higher | 787, 0.149, SE |
| N99 | CON EDISON | 117 RADFORD ST | NJ MANIFEST | Higher | 787, 0.149, SE |
| N100 | CON EDISON | 117 RADFORD ST | NY MANIFEST | Higher | 787, 0.149, SE |
| N101 | CON EDISON | 112 RADFORD ST | NY MANIFEST | Higher | 795, 0.151, SSE |
| N102 | CON EDISON | 112 RADFORD ST | RCRA NonGen / NLR | Higher | 795, 0.151, SSE |
| N103 | CON EDISON | 112 RADFORD ST | NJ MANIFEST | Higher | 795, 0.151, SSE |
| 104 | REAL ESATE TRANSACTI | 31 BAYLEY AVE | NY LTANKS | Higher | 797, 0.151, SW |
| O105 | CONSOLIDATED EDISON | POST ST & ELLIOT ST | E MANIFEST | Higher | 808, 0.153, East |
| Q106 | 78 LANA REALTY LLC | 78 ST ANDREWS PLACE | NY UST | Higher | 819, 0.155, South |
| Q107 | TTF | 78 ST ANDREWS PLACE | NY LTANKS, NY Spills | Higher | 819, 0.155, South |
| N108 | CON EDISON | F/O 115 RADFORD ST | NY MANIFEST | Higher | 825, 0.156, SE |
| R109 | CON EDISON MANHOLE 1 | 59 HAMILTON AVE | RCRA NonGen / NLR, NJ MANIFEST | Higher | 826, 0.156, NE |
| N110 | CON EDISON | 110 RADFORD ST & CLI | NY MANIFEST | Higher | 826, 0.156, SE |
| N111 | CON EDISON | 110 RADFORD ST & CLI | NJ MANIFEST | Higher | 826, 0.156, SE |
| L112 | RIVERDALE CLEANERS | 434 RIVERDALE AVE | RCRA NonGen / NLR, ICIS, US AIRS, NY DRYCLEANERS,... | Higher | 827, 0.157, SSW |
| L113 | RIVERDALE DRY CLEANE | 436-440 RIVERDALE AV | NY SHWS | Higher | 832, 0.158, SSW |
| R114 | JACOB DAVID LLC | 68 HAMILTON AVE | NY LTANKS | Higher | 843, 0.160, NE |
| S115 | CONSOLIDATED EDISON | OPP OF 104 ELLIOTT A | E MANIFEST | Higher | 845, 0.160, East |
| S116 | PHELAN PROPERTY | 104 ELLIOT AVE | NY LTANKS | Higher | 845, 0.160, East |

# MAPPED SITES SUMMARY

Target Property Address:
372 RIVERDALE AVENUE
YONKERS, NY 10705

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| S117 | CONSOLIDATED EDISON | 104 ELLIOT AVE | E MANIFEST | Higher | 845, 0.160, East |
| T118 | POLICE PRECINT #3 | 435 RIVERDALE AVE | NY LTANKS, NY Spills | Higher | 848, 0.161, SSW |
| T119 | THIRD POLICE PRECINC | 435 RIVERDALE AVENUE | NY UST | Higher | 848, 0.161, SSW |
| T120 | THIRD POLICE PRECINC | 435 RIVERDALE AVE | UST FINDER RELEASE | Higher | 848, 0.161, SSW |
| U121 | CON EDISON | 107 RADFORD ST | RCRA NonGen / NLR, FINDS, ECHO | Higher | 882, 0.167, SE |
| U122 | CON EDISON | 107 RADFORD ST | NY MANIFEST | Higher | 882, 0.167, SE |
| U123 | CON EDISON | 107 RADFORD ST | NJ MANIFEST | Higher | 882, 0.167, SE |
| V124 | EUGENIO MARIA DE HOS | 75 MORRIS STREET | NY UST | Higher | 885, 0.168, North |
| V125 | YONKERS PUBLICS SCHO | 75 MORRIS ST | NY Spills, RCRA NonGen / NLR, FINDS, ECHO, NY... | Higher | 885, 0.168, North |
| W126 | NINO CAROZZA | 67-69 ELLIOT AVE | NY LTANKS | Higher | 897, 0.170, ENE |
| W127 | HLJ OF N.Y. INC. | 67-69 ELLIOTT AVENUE | NY UST | Higher | 897, 0.170, ENE |
| P128 | CONSOLIDATED EDISON | 146 ELLIOT AVE | E MANIFEST | Higher | 899, 0.170, ESE |
| O129 | CON EDISON SERVICE B | 88 ELLIOTT AVE | RCRA NonGen / NLR, FINDS | Higher | 919, 0.174, ENE |
| O130 | CON EDISON | 88 ELLIOTT AVE | NY MANIFEST | Higher | 919, 0.174, ENE |
| Q131 | STANGER HOME | 30 GRAY PLACE | NY LTANKS | Higher | 927, 0.176, South |
| Q132 | MIKEVIN MANAGEMENT I | 30 GRAY PLACE | NY UST | Higher | 927, 0.176, South |
| U133 | CON EDISON | 160 ELLIOTT ST | NY MANIFEST | Higher | 942, 0.178, SE |
| S134 | CON EDISON/ATTN: ELE | SOUTH BROADWAY AND 6 | E MANIFEST | Higher | 942, 0.178, East |
| R135 | CON ED | 61 ELLIOT AVE | NY MANIFEST | Higher | 954, 0.181, ENE |
| R136 | CON EDISON | 61 ELLIOT AVE | NJ MANIFEST | Higher | 954, 0.181, ENE |
| R137 | CON EDISON | 61 ELLIOT AVE | RCRA NonGen / NLR | Higher | 954, 0.181, ENE |
| S138 | CON EDISON SERVICE B | 415 S BROADWAY | RCRA NonGen / NLR, NY MANIFEST | Higher | 963, 0.182, ESE |
| 139 | SPILL NUMBER 9512116 | 8 PURSER PL | NY LTANKS | Lower | 968, 0.183, NNW |
| 140 | CONSOLIDATED EDISON | 435 S BROADWAY | E MANIFEST | Higher | 968, 0.183, ESE |
| R141 | CONSOLIDATED EDISON | HAMILTON & MORRIS ST | NY MANIFEST | Higher | 975, 0.185, NE |
| R142 | CON EDISON MANHOLE 1 | HAMILTON AVE & MORRI | RCRA NonGen / NLR, NY MANIFEST, NJ MANIFEST | Higher | 975, 0.185, NE |
| R143 | CON EDISON | MORRIS AVE & HAMILTO | NJ MANIFEST | Higher | 975, 0.185, NE |
| R144 | CON EDISON | MORRIS AVE & HAMILTO | RCRA NonGen / NLR, FINDS, ECHO | Higher | 975, 0.185, NE |
| R145 | CON EDISON MANHOLE 1 | MORRIS ST & HAMITON | RCRA NonGen / NLR, NY MANIFEST, NJ MANIFEST | Higher | 975, 0.185, NE |
| U146 | CON EDISON | 100 RADFORD ST | NJ MANIFEST | Higher | 978, 0.185, SE |
| U147 | CON EDISON | 100 RADFORD ST | RCRA NonGen / NLR | Higher | 978, 0.185, SE |
| X148 | PREMIER ASSET SERVIC | 38 LIVINGSTON AVE | NY LTANKS | Higher | 992, 0.188, NNE |
| U149 | 95 RADFORD REALTY CO | 95 RADFORD STREET | NY UST | Higher | 996, 0.189, SE |
| S150 | UNKNOWN | 4 POST ROAD | NY LTANKS | Higher | 1000, 0.189, East |
| X151 | 45 MORRIS STREET ASS | 45 MORRIS STREET | NY UST | Higher | 1005, 0.190, NNE |
| R152 | PARKSIDE MANAGEMENT | 45 HAMILTON AVE | NY LTANKS | Higher | 1015, 0.192, NE |
| Y153 | SOUTH BROADWAY, INC. | 381 SOUTH BROADWAY | NY AST | Higher | 1016, 0.192, ENE |
| S154 | LORDAE PROPERTY MANA | 393 SOUTH BROADWAY | NY AST | Higher | 1026, 0.194, East |
| S155 | CON EDISON | OPP 393 S BROADWAY | NY MANIFEST | Higher | 1026, 0.194, East |

## MAPPED SITES SUMMARY

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372 RIVERDALE AVENUE
YONKERS, NY 10705

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| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| T156 | 450 RIVERDALE AVE LL | 450 RIVERDALE AVE | NY AST | Higher | 1038, 0.197, SSW |
| Z157 | JOBO REALTY, LLC | 285 HAWTHORNE AVENUE | NY AST | Lower | 1044, 0.198, NNW |
| R158 | ALMONTE RESIDENCE | 33 MORRIS ST | NY LTANKS | Higher | 1053, 0.199, NE |
| W159 | CONSOLIDATED EDISON | 62 ELLIOTT AVE | E MANIFEST | Higher | 1054, 0.200, ENE |
| Y160 | CON EDISON | F/O 385 S BROADWAY | NY MANIFEST | Higher | 1057, 0.200, East |
| T161 | 280 DOBBS FERRY ROAD | 461 RIVERDALE AVENUE | NY UST | Higher | 1059, 0.201, SSW |
| Y162 | 1 POST STREET | 1 POST STREET | NY AST | Higher | 1061, 0.201, East |
| S163 | CON EDISON | POST ST & S BROADWAY | RCRA NonGen / NLR, NY MANIFEST, NJ MANIFEST | Higher | 1063, 0.201, East |
| S164 | CON EDISON | S BROADWAY & POST ST | NY MANIFEST | Higher | 1063, 0.201, East |
| S165 | CON EDISON | POST RD & S. BROADWA | NY MANIFEST | Higher | 1063, 0.201, East |
| S166 | CON EDISON SERVICE B | S BROADWAY & POST ST | RCRA NonGen / NLR, NY MANIFEST | Higher | 1063, 0.201, East |
| S167 | CON EDISON | S BROADWAY & POST AV | NY MANIFEST | Higher | 1063, 0.201, East |
| AA168 | CON EDISON | 39 HAMITTON AVE | E MANIFEST | Higher | 1067, 0.202, NE |
| Y169 | CON EDISON MANHOLE: | 379 S BROADWAY & MCL | RCRA NonGen / NLR, NY MANIFEST | Higher | 1068, 0.202, ENE |
| Y170 | 373 SOUTH BROADWAY | 373 SOUTH BROADWAY | NY AST | Higher | 1069, 0.202, ENE |
| AB171 | CONSOLIDATED EDISON | 45 FAIRFIELD RD & BE | NY MANIFEST | Lower | 1073, 0.203, WNW |
| S172 | CON EDISON SERVICE B | 386 S BROADWAY | RCRA NonGen / NLR, NY MANIFEST | Higher | 1091, 0.207, East |
| AC173 | O CONNER HOME | 30 ST ANDREWS PLACE | NY LTANKS | Higher | 1093, 0.207, SSE |
| AC174 | CON EDISON | 15 SAINT ANDREWS PL | NY MANIFEST | Higher | 1094, 0.207, SE |
| AC175 | CON EDISON | 15 SAINT ANDREWS PL | NJ MANIFEST | Higher | 1094, 0.207, SE |
| AC176 | CON EDISON SERVICE B | 15 ST ANDREWS PL FRO | RCRA NonGen / NLR, FINDS | Higher | 1094, 0.207, SE |
| AC177 | AMCO/RAVAGO MFG AMER | 15 ST ANDREWS PL FRO | NY MANIFEST | Higher | 1094, 0.207, SE |
| AC178 | CON EDISON | 15 SAINT ANDREWS PL | RCRA NonGen / NLR | Higher | 1094, 0.207, SE |
| AD179 | CONSOLIDATED EDISON | 410 S BROADWAY | E MANIFEST | Higher | 1112, 0.211, East |
| AD180 | BANK OF NEW YORK | 410 S BROADWAY | NY LTANKS | Higher | 1112, 0.211, East |
| AD181 | THE BANK OF NEW YORK | 410 SOUTH BROADWAY | NY UST | Higher | 1112, 0.211, East |
| AB182 | BYRNE - TTF | 58 BEECHWOOD TERRACE | NY LTANKS | Lower | 1115, 0.211, WNW |
| AE183 | CONSOLIDATED EDISON | GRAY PL & VALENTINES | E MANIFEST | Higher | 1117, 0.212, South |
| AE184 | CON EDISON MANHOLE 6 | VALENTINE LN & GRAY | RCRA NonGen / NLR, NY MANIFEST, NJ MANIFEST | Higher | 1117, 0.212, South |
| AE185 | CON EDISON TRANSFORM | GRAY PL & VALENTINE | RCRA NonGen / NLR, NY MANIFEST | Higher | 1117, 0.212, South |
| AE186 | CON EDISON TRANSFORM | GRAY PL & VALENTINE | RCRA NonGen / NLR, NY MANIFEST, NJ MANIFEST | Higher | 1117, 0.212, South |
| AA187 | CON EDISON SERVICE B | 25 MORRIS ST | RCRA NonGen / NLR, NY MANIFEST | Higher | 1122, 0.213, NE |
| AD188 | RITE AID #02541 | 420 S BROADWAY | NY Spills, RCRA NonGen / NLR, E MANIFEST | Higher | 1123, 0.213, East |
| Y189 | CONSOLIDATED EDISON | 390 S BROADWAY | E MANIFEST | Higher | 1128, 0.214, East |
| AC190 | CON EDISON | 26 SAINT ANDREWS PL | NY MANIFEST | Higher | 1131, 0.214, SSE |
| AC191 | CON EDISON | 26 SAINT ANDREWS PL | NJ MANIFEST | Higher | 1131, 0.214, SSE |
| AC192 | CON EDISON | 26 SAINT ANDREWS PL | RCRA NonGen / NLR | Higher | 1131, 0.214, SSE |
| Y193 | CON EDISON | MCCLEAN AVE & BROADW | NJ MANIFEST | Higher | 1132, 0.214, ENE |
| Y194 | CON EDISON SERVICE B | S BROADWAY & MCLEAN | RCRA NonGen / NLR, NY MANIFEST | Higher | 1132, 0.214, ENE |

MAPPED SITES SUMMARY

Target Property Address:
372 RIVERDALE AVENUE
YONKERS, NY 10705

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| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| Y195 | CON EDISON | MCCLEAN AVE & BROADW | RCRA NonGen / NLR, FINDS, ECHO | Higher | 1132, 0.214, ENE |
| Y196 | CON EDISON | S BROADWAY & MCLEAN | NY MANIFEST | Higher | 1132, 0.214, ENE |
| Y197 | CON EDISON | S BROADWAY & MCCLEAN | NY MANIFEST | Higher | 1132, 0.214, ENE |
| Y198 | CON EDISON VAULT: 63 | MCLEAN AVE & S BROAD | RCRA NonGen / NLR, NY MANIFEST | Higher | 1132, 0.214, ENE |
| Y199 | CON EDISON | S BROADWAY & MCLEAN | RCRA NonGen / NLR, NY MANIFEST | Higher | 1132, 0.214, ENE |
| Y200 | CON EDISON SERVICE B | MCCLEAN AVE & S BROA | RCRA NonGen / NLR, NY MANIFEST | Higher | 1132, 0.214, ENE |
| Y201 | CON EDISON | MCCLEAN AVE & BROADW | NY MANIFEST | Higher | 1132, 0.214, ENE |
| Y202 | CON EDISON | MCLEANE AVE & S BROA | NY MANIFEST | Higher | 1132, 0.214, ENE |
| Y203 | CON EDISON SERVICE B | S BROADWAY & MCCLEAN | RCRA NonGen / NLR, FINDS | Higher | 1132, 0.214, ENE |
| Y204 | CON EDISON | S BROADWAY & MCLEAN | RCRA NonGen / NLR, NY MANIFEST, NJ MANIFEST | Higher | 1132, 0.214, ENE |
| Y205 | CON EDISON SERVICE B | BROADWAY & MCLEAN AV | RCRA NonGen / NLR | Higher | 1132, 0.214, ENE |
| Y206 | CONSOLIDATED EDISON | S BROADWAY & MCLEAN | NY MANIFEST | Higher | 1132, 0.214, ENE |
| Y207 | CON EDISON | BROADWAY & MCLEAN AV | NY MANIFEST | Higher | 1132, 0.214, ENE |
| Y208 | CON EDISON SERVICE B | MCCLEAN AVE & S BROA | NJ MANIFEST | Higher | 1132, 0.214, ENE |
| Y209 | CON EDISON SERVICE B | S BROADWAY & MCLEAN | RCRA NonGen / NLR | Higher | 1132, 0.214, ENE |
| Z210 | J.R. PROPERTIES OF Y | 271-273 HAWTHORNE AV | NY AST | Lower | 1137, 0.215, NNW |
| AE211 | CON EDISON SERVICE B | 185 VALENTINE LN & G | RCRA NonGen / NLR, NY MANIFEST | Higher | 1139, 0.216, South |
| W212 | 359 S BROADWAY CLEAN | 359 S BROADWAY | RCRA-VSQG, US AIRS, E MANIFEST, NY MANIFEST, RI... | Higher | 1147, 0.217, ENE |
| W213 | FOUR SEASONS DRYCLEA | 359 S BROADWAY | NY DRYCLEANERS | Higher | 1147, 0.217, ENE |
| W214 | CON EDISON | F/O 359 W BROADWAY | NY MANIFEST | Higher | 1147, 0.217, ENE |
| AF215 | CON EDISON | 123 VALENTINE LN & H | NY MANIFEST | Higher | 1159, 0.220, SW |
| AF216 | CON EDISON VAULT: 75 | 123 VALENTINE LN & H | RCRA NonGen / NLR | Higher | 1159, 0.220, SW |
| AB217 | RESIDENCE | 30 FAIRFIELD PLACE | NY LTANKS | Lower | 1170, 0.222, WNW |
| AD218 | RITE AID #2541 | 420 S BROADWAY | NY MANIFEST | Higher | 1172, 0.222, East |
| AG219 | CON EDISON MANHOLE: | S BROADWAY & RADFORD | RCRA NonGen / NLR, NY MANIFEST | Higher | 1179, 0.223, SE |
| AG220 | CON EDISON MANHOLE: | RADFORD ST & BROADWA | NJ MANIFEST | Higher | 1179, 0.223, SE |
| AG221 | CON EDISON TRANSFORM | RADFORD AVE & S BROA | RCRA NonGen / NLR, NY MANIFEST, NJ MANIFEST | Higher | 1179, 0.223, SE |
| AG222 | CON EDISON | S BROADWAY & RADFORD | NY MANIFEST | Higher | 1179, 0.223, SE |
| AG223 | CON EDISON MANHOLE: | RADFORD ST & BROADWA | RCRA NonGen / NLR, NY MANIFEST | Higher | 1179, 0.223, SE |
| AG224 | CON EDISON MANHOLE: | S BROADWAY & RADFORD | RCRA NonGen / NLR | Higher | 1179, 0.223, SE |
| AG225 | CONSOLIDATED EDISON | RADFORD ST & SOUTH B | NY MANIFEST | Higher | 1179, 0.223, SE |
| AE226 | VALENTINE LANE ASSOC | 200 VALENTINE LANE | NY UST, NY AST | Higher | 1197, 0.227, South |
| AE227 | CONSOLIDATED EDISON | 200 VALENTINE LN | RCRA NonGen / NLR, E MANIFEST, NY MANIFEST | Higher | 1197, 0.227, South |
| AG228 | CON EDISON | 471 S BROADWAY | NJ MANIFEST | Higher | 1208, 0.229, SE |
| AG229 | CON EDISON | 471 S BROADWAY | RCRA NonGen / NLR, FINDS, ECHO | Higher | 1208, 0.229, SE |
| AG230 | CON EDISON | 471 S BROADWAY | NY MANIFEST | Higher | 1208, 0.229, SE |
| AF231 | PUBLIC SCHOOL #27 | PUBLIC SCHOOL #27 | NY LTANKS | Higher | 1216, 0.230, SSW |
| AG232 | CONSOLIDATED EDISON | 462 SOUTH BROADWAY | E MANIFEST | Higher | 1227, 0.232, SE |
| AH233 | CONSOLIDATED EDISON | 347 S BROADWAY | RCRA NonGen / NLR, FINDS, ECHO, E MANIFEST | Higher | 1244, 0.236, ENE |

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YONKERS, NY 10705

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|---|---|---|---|---|---|
| AH234 | CON EDISON | 347 S BROADWAY | NY MANIFEST | Higher | 1244, 0.236, ENE |
| AH235 | CON EDISON | 347 S BROADWAY | NJ MANIFEST | Higher | 1244, 0.236, ENE |
| AC236 | CON EDISON | 12 SAINT ANDREWS PL | RCRA NonGen / NLR | Higher | 1244, 0.236, SE |
| AC237 | CON ED | 12 SAINT ANDREWS PL | NY MANIFEST | Higher | 1244, 0.236, SE |
| AC238 | CON EDISON | 12 SAINT ANDREWS PL | NJ MANIFEST | Higher | 1244, 0.236, SE |
| AI239 | NEW FRENCH DRY CLEAN | 462 RIVERDALE AVE | RCRA NonGen / NLR, ICIS, US AIRS, NY MANIFEST | Higher | 1252, 0.237, SSW |
| AI240 | NEW FRENCH DRY CLEAN | 462 RIVERDALE AVE | FINDS, ECHO, DRYCLEANERS | Higher | 1252, 0.237, SSW |
| AI241 | NEW FRENCH DRY CLEAN | 462 RIVERDALE AVE | NY DRYCLEANERS | Higher | 1252, 0.237, SSW |
| Z242 | PALAZZO ENTERPRISES, | 267-269 HAWTHORNE AV | NY AST | Lower | 1258, 0.238, NNW |
| AJ243 | CON EDISON SERVICE B | 366 S BROADWAY FRONT | RCRA NonGen / NLR, NY MANIFEST | Higher | 1261, 0.239, ENE |
| AJ244 | CON EDISON | F/O 366 S BROADWAY & | NY MANIFEST | Higher | 1261, 0.239, ENE |
| 245 | FRANKLIN RESIDENCE | 104 FRANKLIN AVENUE | NY UST | Higher | 1268, 0.240, West |
| Z246 | 34 PIER STREET | 34 PIER STREET | NY AST | Lower | 1281, 0.243, NNW |
| AK247 | BROADWAY CLEANERS | 479 SOUTH BROADWAY | NY DRYCLEANERS | Higher | 1284, 0.243, SE |
| AK248 | BROADWAY CLEANERS | 479 S BROADWAY | RCRA-VSQG, ICIS, US AIRS, NY MANIFEST | Higher | 1284, 0.243, SE |
| AL249 | CON EDISON TRANSFORM | ABEEL ST & VALENTINE | RCRA NonGen / NLR, NY MANIFEST, NJ MANIFEST | Higher | 1284, 0.243, SSW |
| AL250 | CON EDISON | VALENTINE LA & ABEEL | NY MANIFEST | Higher | 1284, 0.243, SSW |
| 251 | PETNUCH RESIDENCE | 445 HAWTHORNE AVE | NY LTANKS | Higher | 1298, 0.246, SW |
| AM252 | RENEE BURKE MANOR | 15 HAMILTON AVENUE | NY UST | Higher | 1314, 0.249, NNE |
| AM253 | APT BUILDING - PBS T | 15 HAMILTON AVE | NY LTANKS | Higher | 1314, 0.249, NNE |
| AM254 | 15 HAMILTON ASSOC | 15 HAMILTON AVE | NY LTANKS | Higher | 1314, 0.249, NNE |
| AD255 | CON EDISON MANHOLE | MCLEAN AVE & ROMAINE | RCRA NonGen / NLR, NY MANIFEST | Higher | 1318, 0.250, East |
| AG256 | APARTMENT | 70 RADFORD STREET | NY LTANKS | Higher | 1353, 0.256, SE |
| AN257 | 252 HAWTHORNE AVENUE | 252 HAWTHORNE AVENUE | UST FINDER RELEASE | Lower | 1393, 0.264, NNW |
| AN258 | 252 HAWTHORNE AVENUE | 252 HAWTHORNE AVENUE | NY LTANKS | Lower | 1393, 0.264, NNW |
| AO259 | YONKERS STP | LUDLOW STREET | NY LTANKS, NY Spills | Lower | 1423, 0.270, North |
| AP260 | CABREA | 39 PIER STREET | NY LTANKS | Lower | 1429, 0.271, NNW |
| AH261 | SPILL NUMBER 0007654 | 340 SOUTH BROADWAY | NY LTANKS | Higher | 1431, 0.271, ENE |
| 262 | MCGLYNN RESIDENCE | 106 VALENTINE LN | NY LTANKS | Higher | 1452, 0.275, SW |
| AK263 | APT BUILDING | 490 SOUTH BROADWAY | NY LTANKS | Higher | 1488, 0.282, SE |
| AO264 | COMMERCIAL PROPERTY | 117 LUDLOW STREET | NY LTANKS | Lower | 1510, 0.286, North |
| AO265 | APARTMENT BUILDING | 117- 119 LUDLOW ST | NY LTANKS | Lower | 1510, 0.286, North |
| AQ266 | RESIDENTIAL - TTF | 33 RANDOLPH STREET | NY LTANKS | Higher | 1518, 0.287, ESE |
| 267 | SOTO HOME | 69 SUNNYSIDE DRIVE | NY LTANKS | Lower | 1519, 0.288, WNW |
| AR268 | RESI: GARCIA | 9 LAWRENCE ST | NY LTANKS | Higher | 1604, 0.304, SE |
| AP269 | COLER HOLDING | 166 LUDLOW STREET | NY LTANKS, NY AST | Lower | 1634, 0.309, NNW |
| AQ270 | GILROY RESIDENCE | 45 RADFORD STREET | NY LTANKS, NY Spills | Higher | 1635, 0.310, ESE |
| AS271 | SADIN HOME | 112 BELVEDERE DRIVE | NY LTANKS, NY Spills | Lower | 1644, 0.311, WSW |
| AQ272 | RESIDENCE | 42 RANDOLPH STREET | NY LTANKS | Higher | 1652, 0.313, ESE |

## MAPPED SITES SUMMARY

Target Property Address:
372 RIVERDALE AVENUE
YONKERS, NY 10705

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| 273 | MZ MOVERS | 231 HAWTHORNE AVE | NY LTANKS | Lower | 1654, 0.313, NNW |
| AT274 | T & G SERVICE STATIO | 310 SOUTH BROADWAY | NY LTANKS, NY Spills | Higher | 1666, 0.316, NE |
| AT275 | BROADWAY GAS POST | 310 SOUTH BROADWAY | UST FINDER RELEASE | Higher | 1666, 0.316, NE |
| AT276 | T & G SERVICE STATIO | 310 SOUTH BROADWAY | UST FINDER RELEASE | Higher | 1666, 0.316, NE |
| 277 | RESIDENTIAL PBS TTF | 17 PERSHING AVE | NY LTANKS | Higher | 1678, 0.318, South |
| 278 | 46-70 MCLEAN AVENUE | 48 MCLEAN AVENUE (F/ | NY ENG CONTROLS, NY INST CONTROL, NY BROWNFIELDS | Higher | 1686, 0.319, East |
| AQ279 | MUNICIPAL HOUSING AU | 30 WESTERN AVE | NY LTANKS | Higher | 1707, 0.323, ESE |
| AS280 | BARTMAN RESIDENCE | 116 BELVEDERE DRIVE | NY LTANKS | Higher | 1739, 0.329, WSW |
| AU281 | DEVA LEASING CORP. | 13 LUDLOW STREET | NY LTANKS | Higher | 1740, 0.330, NE |
| AU282 | DEVA LEASING CORP. | 13 LUDLOW STREET | UST FINDER RELEASE | Higher | 1740, 0.330, NE |
| AU283 | YONKERS TREATMENT PL | LUDLOW ST DOCK SOUTH | NY LTANKS | Higher | 1752, 0.332, NE |
| AS284 | BARTMAN HOME | 110 SUNNYSIDE DRIVE | NY LTANKS | Lower | 1755, 0.332, West |
| AT285 | YONKERS TREAT. PLANT | LUDLOW DOCK FACILITY | NY LTANKS | Higher | 1757, 0.333, NE |
| AU286 | LUDLOW COMMONS | 7 LUDLOW STREET | NY BROWNFIELDS | Higher | 1779, 0.337, NE |
| AU287 | BUSINESS | 7-17 LUDLOW STREET | UST FINDER RELEASE | Higher | 1779, 0.337, NE |
| AU288 | 17 LUDLOW STREET PRO | 7-17 LUDLOW STREET | NY LTANKS, NY Spills | Higher | 1779, 0.337, NE |
| AV289 | ICON CONTRACTING GRO | 36 RADFORD STREET | NY LTANKS, NY Spills, RCRA NonGen / NLR, FINDS,... | Higher | 1811, 0.343, ESE |
| AR290 | RESIDENCE | 58 BRUCE ST | NY LTANKS | Higher | 1826, 0.346, SE |
| AW291 | PARK LINCOLN MERC | 55 KNOWLES ST | NY LTANKS | Lower | 1945, 0.368, NNW |
| 292 | EISSA - TTF | 65 HIGHLAND AVE | NY LTANKS | Higher | 1946, 0.369, NNE |
| AX293 | SPILL NUMBER 0205392 | 75 BRUCE AVE | NY LTANKS, NY Spills | Higher | 1946, 0.369, SE |
| 294 | APARTMENT - TTF | 525 RIVERDALE AVE | NY LTANKS, NY Spills | Higher | 1966, 0.372, SSW |
| AV295 | PBS | 70 WESTERN AVE | NY LTANKS | Higher | 2003, 0.379, ESE |
| AY296 | ST. PETERS SCHOOL | 204 HAWTHORNE AVE | NY LTANKS | Lower | 2010, 0.381, NNW |
| 297 | APARTMENT BLDG | 480 HAWTHORNE AVE | NY LTANKS | Higher | 2021, 0.383, SW |
| AZ298 | AMERICAN SUGAR REFIN | ONE FEDERAL STREET | NY MOSF, NY Spills | Lower | 2025, 0.384, NW |
| AW299 | CON EDISON - LUDLOW | KNOWLES STREET | EDR MGP | Lower | 2045, 0.387, NNW |
| AX300 | APT HOUSE | 85 BRUCE AVE | NY LTANKS | Higher | 2059, 0.390, SE |
| 301 | MICHAEL - TTF | 346 VAN CORTLANDT PA | NY LTANKS | Higher | 2085, 0.395, East |
| AW302 | FORMER LUDLOW STREET | 150 DOWNING, 55 & 58 | NY BROWNFIELDS | Lower | 2105, 0.399, NNW |
| 303 | HOUSING PROJECT | 76 WESTERN AVE | NY LTANKS | Higher | 2107, 0.399, ESE |
| BA304 | APT BLDG | 260 SOUTH BROADWAY | NY LTANKS, NY Spills | Higher | 2114, 0.400, NE |
| AZ305 | FERNBROOK PARK & COM | 70 FERNBROOK STREET | NY BROWNFIELDS, NY Spills | Lower | 2135, 0.404, NW |
| 306 | 558 SOUTH BROADWAY | 558 SOUTH BROADWAY S | UST FINDER RELEASE | Higher | 2152, 0.408, SSE |
| 307 | SHETH HOME | 20 LEHMAN TERRACE | NY LTANKS | Higher | 2156, 0.408, South |
| AY308 | CE- LUDLOW ST-YONKER | 162 DOWNING STREET | NY VCP, NY MGP | Lower | 2172, 0.411, NNW |
| AY309 | CE- LUDLOW ST-YONKER | 162 DOWNING STREET | NY SHWS | Lower | 2172, 0.411, NNW |
| AY310 | CITY GARAGE | 152 DOWNING STREET | UST FINDER RELEASE | Lower | 2174, 0.412, NNW |
| AY311 | DOWNING ST GARAGE | 152 DOWNING STREET | UST FINDER RELEASE | Lower | 2174, 0.412, NNW |

## MAPPED SITES SUMMARY

Target Property Address:
372 RIVERDALE AVENUE
YONKERS, NY 10705

Click on Map ID to see full detail.

| MAP ID | SITE NAME | ADDRESS | DATABASE ACRONYMS | RELATIVE ELEVATION | DIST (ft. & mi.) DIRECTION |
|---|---|---|---|---|---|
| AY312 | YONKERS CITY GARAGE | 152 DOWNING STREET | NY LTANKS, NY AST, NY Spills | Lower | 2174, 0.412, NNW |
| 313 | A. TARRICONE INC. | FOOT OF LUDLOW STREE | NY MOSF, NY MOSF AST | Lower | 2197, 0.416, NW |
| BB314 | APT BLDG | 15 RADFORD STREET | NY LTANKS, NY Spills | Higher | 2237, 0.424, ESE |
| AZ315 | CASTLE OIL TERM. | ASHBURN & ELM ST | NY LTANKS | Lower | 2244, 0.425, NW |
| 316 | APT BUILDING UST | 16 CORNELL AVE | NY LTANKS, NY Spills | Higher | 2257, 0.427, ESE |
| BA317 | MR RICHARD MOORE | 3 UNDERCLIFF ST | NY LTANKS | Higher | 2270, 0.430, NE |
| AZ318 | YONKERS WASTE WATER | 1 FERNBROOK ST | NY LTANKS, NY CBS, NY AST, NY Spills | Lower | 2275, 0.431, NW |
| BB319 | ST DENNIS CHURCH | 470 VAN CORTLAND PAR | NY LTANKS | Higher | 2294, 0.434, ESE |
| 320 | RESIDENTIAL - TTF | 106 UNDERCLIFF ST | NY LTANKS | Higher | 2323, 0.440, ENE |
| BC321 | SPILL NUMBER 0209043 | 99 ALTA AVE | NY LTANKS | Higher | 2327, 0.441, NE |
| BD322 | GETTY SQUARE BRANCH | 52 LAWRENCE STREET | US BROWNFIELDS | Higher | 2356, 0.446, SE |
| 323 | 185 - 187 RIVERDALE | 185 RIVERDALE AVENUE | NY LTANKS, NY ENG CONTROLS, NY INST CONTROL, NY... | Higher | 2372, 0.449, North |
| BC324 | YOUNG ADULT INSTITUT | 1 ROSE LANE | NY LTANKS | Higher | 2446, 0.463, NE |
| BD325 | MCGWYNE - TTF | 497 VAN CORTLANDT PA | NY LTANKS | Higher | 2454, 0.465, ESE |
| 326 | RIVERVIEW GARDEN COU | 100 HIGHLAND AVE | NY LTANKS | Higher | 2483, 0.470, NNE |
| BE327 | ST. DENNIS SCHOOL | 73 LAWRENCE STREET | NY LTANKS, NY Spills | Higher | 2493, 0.472, ESE |
| BF328 | APARTMENT BLDG | 80 SARATOGA AVE | NY LTANKS | Higher | 2493, 0.472, SE |
| BE329 | LAWRENCE | 73 ST | NY LTANKS | Higher | 2501, 0.474, ESE |
| BG330 | MOUNT SAINT VINCENT | 6301 RIVERDALE AVENU | NY LTANKS, NY AST, NY Spills | Higher | 2516, 0.477, SSW |
| BG331 | COLLEGE OF MT ST VIN | 6301 RIVERDALE AVE | NY LTANKS, NY Spills | Higher | 2516, 0.477, SSW |
| BF332 | SPILL NUMBER 9807402 | 88-90 SARATOGA AVE | NY LTANKS | Higher | 2599, 0.492, SE |
| BF333 | SPILL NUMBER 9808503 | 88 AND 90 SARATOGA A | NY LTANKS | Higher | 2599, 0.492, SE |
| 334 | YONKERS MOTORS | 210 SOUTH BROADWAY | NY LTANKS | Higher | 2616, 0.495, NNE |
| 335 | APARTMENT BLDG - TTF | 502 VAN CORTLANDT PA | NY LTANKS | Higher | 2618, 0.496, ESE |
| 336 | DELLOS SANTOS TTF | 54 CAROLINE AVE | NY LTANKS, NY Spills | Higher | 2633, 0.499, NNE |
| 337 | \HEBREW HOME FOR THE | 5901 PALISADE AV | NY LTANKS, NY NYC OER | Higher | 3957, 0.749, SSW |

# EXECUTIVE SUMMARY

## TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 9 of the attached EDR Radius Map report:

| Site | Database(s) | EPA ID |
|---|---|---|
| MECHANIC SHOP<br>372 RIVERDALE AVE<br>YONKERS, NY | NY Spills<br>Spill Number/Closed Date: 2506149 / Not Reported<br>Spill Number/Closed Date: 1710340 / 2018-04-16<br>Site ID: 683635<br>Site ID: 566860<br>Spill Date: 2025-07-31<br>Spill Date: 2018-02-15 | N/A |
| 372 RIVERDALE AVENUE<br>372 RIVERDALE AVENUE<br>YONKERS, NY 10705 | NY UST<br>Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026<br>Status: 2. Temporarily out of service<br>Id/Status:: 3-802158<br>Site Status: Active | N/A |
| GOODYEAR AUTO SERVIC<br>372 RIVERDALE AVE<br>YONKERS, NY 10705 | RCRA-VSQG<br>EPA ID:: NYD135534493<br>FINDS<br>Registry ID:: 110004382819<br>ECHO<br>Registry ID: 110004382819<br>RI MANIFEST<br>EPA Id: NYD135534493<br>Manifest Document Number: 003638364FLE<br>NY MANIFEST<br>EPA ID: NYD135534493 | NYD135534493 |

## DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

## STANDARD ENVIRONMENTAL RECORDS

### *Lists of Federal NPL (Superfund) sites*

Proposed NPL..... Proposed National Priority List Sites

NPL LIENS ---- Federal Superfund Liens

***Lists of Federal Delisted NPL sites***

Delisted NPL ---- National Priority List Deletions

***Lists of Federal sites subject to CERCLA removals and CERCLA orders***

FEDERAL FACILITY ---- Federal Facility Site Information listing

***Lists of Federal CERCLA sites with NFRAP***

SEMS-ARCHIVE ---- Superfund Enterprise Management System Archive

***Lists of Federal RCRA facilities undergoing Corrective Action***

CORRACTS ---- Corrective Action Report

***Lists of Federal RCRA TSD facilities***

RCRA-TSDF ---- RCRA - Treatment, Storage and Disposal

***Lists of Federal RCRA generators***

RCRA-SQG ---- RCRA - Small Quantity Generators

***Federal institutional controls / engineering controls registries***

LUCIS ---- Land Use Control Information System

***Federal ERNS list***

ERNS ---- Emergency Response Notification System

***Lists of state- and tribal hazardous waste facilities***

NJ SHWS ---- Known Contaminated Sites in New Jersey

***Lists of state and tribal landfills and solid waste disposal facilities***

NY SWF/LF ---- Facility Register
NJ SWF/LF ---- Solid Waste Facility Directory

***Lists of state and tribal leaking storage tanks***

INDIAN LUST ---- Leaking Underground Storage Tanks on Indian Land
NY HIST LTANKS ---- Listing of Leaking Storage Tanks

***Lists of state and tribal registered storage tanks***

FEMA UST ---- Underground Storage Tank Listing
NJ UST ---- Underground Storage Tank Data
NY CBS UST ---- Chemical Bulk Storage Database
NY MOSF UST ---- Major Oil Storage Facilities Database
NY CBS AST ---- Chemical Bulk Storage Database

INDIAN UST - Underground Storage Tanks on Indian Land
NY TANKS - Storage Tank Faciliy Listing

***State and tribal institutional control / engineering control registries***

NY RES DECL - Restrictive Declarations Listing
NJ ENG CONTROLS - Declaration Environmental Restriction/Deed Notice Sites
NJ INST CONTROL - Classification Exception Area Sites

***Lists of state and tribal voluntary cleanup sites***

NJ VCP - Voluntary Cleanup Program Sites
INDIAN VCP - Voluntary Cleanup Priority Listing

***Lists of state and tribal brownfield sites***

NJ BROWNFIELDS - Brownfields Database
NY ERP - Environmental Restoration Program Listing

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Lists of Landfill / Solid Waste Disposal Sites***

NY SWTIRE - Registered Waste Tire Storage & Facility List
NY SWRCY - Registered Recycling Facility List
NJ SWRCY - Approved Class B Recycling Facilities
INDIAN ODI - Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 - Torres Martinez Reservation Illegal Dump Site Locations
ODI - Open Dump Inventory
IHS OPEN DUMPS - Open Dumps on Indian Land

***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL - Delisted National Clandestine Laboratory Register
NY DEL SHWS - Delisted Registry Sites
US CDL - National Clandestine Laboratory Register

***Local Lists of Registered Storage Tanks***

NY HIST UST - Historical Petroleum Bulk Storage Database
NY HIST AST - Historical Petroleum Bulk Storage Database

***Local Land Records***

NY LIENS - Spill Liens Information
NJ LIENS - Environmental LIENS
LIENS 2 - CERCLA Lien Information

***Records of Emergency Release Reports***

HMIRS - Hazardous Materials Information Reporting System
NY Hist Spills - SPILLS Database
NY SPILLS 90 - SPILLS 90 data from FirstSearch
NJ SPILLS 90 - SPILLS 90 data from FirstSearch

| | |
|---|---|
| NY SPILLS 80 | SPILLS 80 data from FirstSearch |
| NJ SPILLS 80 | SPILLS 80 data from FirstSearch |

***Other Ascertainable Records***

| | |
|---|---|
| FUDS | Formerly Used Defense Sites |
| DOD | Department of Defense Sites |
| SCRD DRYCLEANERS | State Coalition for Remediation of Drycleaners Listing |
| US FIN ASSUR | Financial Assurance Information |
| EPA WATCH LIST | EPA WATCH LIST |
| 2020 COR ACTION | 2020 Corrective Action Program List |
| TSCA | Toxic Substances Control Act |
| TRIS | Toxic Chemical Release Inventory System |
| SSTS | Section 7 Tracking Systems |
| RMP | Risk Management Plans |
| RAATS | RCRA Administrative Action Tracking System |
| PADS | PCB Activity Database System |
| FTTS | FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act) |
| MLTS | Material Licensing Tracking System |
| COAL ASH DOE | Steam-Electric Plant Operation Data |
| COAL ASH EPA | Coal Combustion Residues Surface Impoundments List |
| PCB TRANSFORMER | PCB Transformer Registration Database |
| RADINFO | Radiation Information Database |
| HIST FTTS | FIFRA/TSCA Tracking System Administrative Case Listing |
| DOT OPS | Incident and Accident Data |
| INDIAN RESERV | Indian Reservations |
| FUSRAP | Formerly Utilized Sites Remedial Action Program |
| UMTRA | Uranium Mill Tailings Sites |
| LEAD SMELTERS | Lead Smelter Sites |
| US MINES | Mines Master Index File |
| ABANDONED MINES | Abandoned Mines |
| MINES MRDS | Mineral Resources Data System |
| UXO | Unexploded Ordnance Sites |
| DOCKET HWC | Hazardous Waste Compliance Docket Listing |
| FUELS PROGRAM | EPA Fuels Program Registered Listing |
| PFAS NPL | Superfund Sites with PFAS Detections Information |
| PFAS FEDERAL SITES | Federal Sites PFAS Information |
| PFAS TRIS | List of PFAS Added to the TRI |
| PFAS TSCA | PFAS Manufacture and Imports Information |
| PFAS RCRA MANIFEST | PFAS Transfers Identified In the RCRA Database Listing |
| PFAS ATSDR | PFAS Contamination Site Location Listing |
| PFAS WQP | Ambient Environmental Sampling for PFAS |
| PFAS PROJECT | NORTHEASTERN UNIVERSITY PFAS PROJECT |
| PFAS NPDES | Clean Water Act Discharge Monitoring Information |
| PFAS ECHO FIRE TRAIN | Facilities in Industries that May Be Handling PFAS Listing |
| PFAS PT 139 AIRPORT | All Certified Part 139 Airports PFAS Information Listing |
| AQUEOUS FOAM NRC | Aqueous Foam Related Incidents Listing |
| BIOSOLIDS | ICIS-NPDES Biosolids Facility Data |
| UST FINDER | UST Finder Database |
| NY PFAS | PFAS Contamination Site Location Listing |
| NJ PFAS | PFAS Contamination Site Location |
| NY AIRS | Air Emissions Data |
| NJ AIRS | Emissions Inventory Listing |
| NY COAL ASH | Coal Ash Disposal Site Listing |

NJ COAL ASH - Coal Ash Listing
NJ DRYCLEANERS - Drycleaner List
NY E DESIGNATION - E DESIGNATION SITE LISTING
NJ Financial Assurance - Financial Assurance Information Listing
NY Financial Assurance - Financial Assurance Information Listing
NY HSWDS - Hazardous Substance Waste Disposal Site Inventory
NY LEAD - Lead-based Paint Testing Results
NJ NPDES - New Jersey Pollutant Discharge Elimination System Dischargers
NY VAPOR REOPENED - Vapor Intrusion Legacy Site List
NY UIC - Underground Injection Control Wells
NJ UIC - Underground Injection Wells Database
NY COOLING TOWERS - Registered Cooling Towers
NY NYC LAND USE - New York City Land Use Information
NY ILI - New York State Inactive Landfill Initiative
ABAND AIRFIELDS - Abandoned & Little-Known Airfields Listing

**EDR RECOVERED GOVERNMENT ARCHIVES**

***Exclusive Recovered Govt. Archives***

NY RGA HWS - Recovered Government Archive State Hazardous Waste Facilities List
NJ RGA HWS - Recovered Government Archive State Hazardous Waste Facilities List
NY RGA LF - Recovered Government Archive Solid Waste Facilities List
NJ RGA LF - Recovered Government Archive Solid Waste Facilities List

**SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

**STANDARD ENVIRONMENTAL RECORDS**

***Lists of Federal NPL (Superfund) sites***

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 12/26/2025 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***HUDSON RIVER PCBS*** | ***NO STREET APPLICABLE*** | ***WNW 1/4 - 1/2 (0.388 mi.)*** | ***0*** | ***26*** |

Cerclis ID:: 202229
EPA Id: NYD980763841

***Lists of Federal sites subject to CERCLA removals and CERCLA orders***

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 12/26/2025 has revealed that there is 1 SEMS site within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***HUDSON RIVER PCBS***<br>Site ID: 0202229<br>EPA Id: NYD980763841 | ***NO STREET APPLICABLE*** | ***WNW 1/4 - 1/2 (0.388 mi.)*** | ***0*** | ***26*** |

***Lists of Federal RCRA generators***

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 11/30/2025 has revealed that there are 2 RCRA-VSQG sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***359 S BROADWAY CLEAN***<br>EPA ID:: NYD982531568 | ***359 S BROADWAY*** | ***ENE 1/8 - 1/4 (0.217 mi.)*** | ***W212*** | ***526*** |
| ***BROADWAY CLEANERS***<br>EPA ID:: NYD986943413 | ***479 S BROADWAY*** | ***SE 1/8 - 1/4 (0.243 mi.)*** | ***AK248*** | ***679*** |

***Federal institutional controls / engineering controls registries***

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 10/30/2025 has revealed that

there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***HUDSON RIVER PCBS*** | ***NO STREET APPLICABLE*** | ***WNW 1/4 - 1/2 (0.388 mi.)*** | ***0*** | ***26*** |
| EPA ID:: NYD980763841 | | | | |
| EPA ID:: NYD980763841 | | | | |

US INST CONTROLS: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROLS list, as provided by EDR, and dated 10/30/2025 has revealed that there is 1 US INST CONTROLS site within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***HUDSON RIVER PCBS*** | ***NO STREET APPLICABLE*** | ***WNW 1/4 - 1/2 (0.388 mi.)*** | ***0*** | ***26*** |
| EPA ID:: NYD980763841 | | | | |

***Lists of state- and tribal hazardous waste facilities***

NY SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environmental Conservation's Inactive Hazardous waste Disposal Sites in New York State.

A review of the NY SHWS list, as provided by EDR, and dated 10/30/2025 has revealed that there are 2 NY SHWS sites within approximately 1 mile of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| RIVERDALE DRY CLEANE | 436-440 RIVERDALE AV | SSW 1/8 - 1/4 (0.158 mi.) | L113 | 315 |
| Site Code: 598397 | | | | |
| Class Code: Significant threat to the public health or environment - action required. | | | | |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| CE- LUDLOW ST-YONKER | 162 DOWNING STREET | NNW 1/4 - 1/2 (0.411 mi.) | AY309 | 871 |
| Site Code: 566784 | | | | |

***Lists of state and tribal leaking storage tanks***

NY LTANKS: Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills

A review of the NY LTANKS list, as provided by EDR, and dated 10/30/2025 has revealed that there are

# EXECUTIVE SUMMARY

96 NY LTANKS sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| STUPP | 110 PURSER PLACE | SW 0 - 1/8 (0.058 mi.) | B22 | 138 |
| Spill Number/Closed Date: 9911693 / 2012-01-31 | | | | |
| Site ID: 142858 | | | | |
| Spill Date: 2000-01-07 | | | | |
| ***FLYNN MANNOR*** | ***334 RIVERDALE AVE*** | ***NNW 0 - 1/8 (0.065 mi.)*** | ***D25*** | ***141*** |
| Spill Number/Closed Date: 0403465 / 2004-12-10 | | | | |
| Spill Number/Closed Date: 0806549 / 2010-11-30 | | | | |
| Site ID: 287165 | | | | |
| Site ID: 403832 | | | | |
| Spill Date: 2004-06-16 | | | | |
| Spill Date: 2008-08-05 | | | | |
| ACCURATE PLASTICS | 18 MORRIS PALCE | NE 0 - 1/8 (0.099 mi.) | J48 | 181 |
| Spill Number/Closed Date: 0909488 / 2010-03-30 | | | | |
| Site ID: 422194 | | | | |
| Spill Date: 2009-11-24 | | | | |
| RESIDENTIAL TTF | 38 POST STREET | E 0 - 1/8 (0.100 mi.) | F52 | 186 |
| Spill Number/Closed Date: 0609234 / 2012-08-17 | | | | |
| Site ID: 373385 | | | | |
| Spill Date: 2006-11-07 | | | | |
| SPILL NUMBER 9812660 | 150 LIVINGSTON AVE | SSE 0 - 1/8 (0.101 mi.) | H54 | 190 |
| Spill Number/Closed Date: 9812660 / 1999-05-10 | | | | |
| Site ID: 271726 | | | | |
| Spill Date: 1999-01-13 | | | | |
| REAL ESTATE TTF | 1 GRAY PLACE | S 0 - 1/8 (0.102 mi.) | E55 | 191 |
| Spill Number/Closed Date: 0311498 / 2012-08-13 | | | | |
| Site ID: 153615 | | | | |
| Spill Date: 2004-01-12 | | | | |
| RESIDENCE | 69 HAMILTON AVE | NE 1/8 - 1/4 (0.131 mi.) | J77 | 239 |
| Spill Number/Closed Date: 9806576 / 2005-02-09 | | | | |
| Site ID: 321175 | | | | |
| Spill Date: 1998-08-27 | | | | |
| DIAZ RESIDENCE | 62 LIVINGSTON AVE | NNE 1/8 - 1/4 (0.132 mi.) | 80 | 244 |
| Spill Number/Closed Date: 0513069 / 2006-02-13 | | | | |
| Site ID: 359483 | | | | |
| Spill Date: 2006-02-11 | | | | |
| APT BUILDING | 432 RIVERDALE AVE | SSW 1/8 - 1/4 (0.144 mi.) | L94 | 262 |
| Spill Number/Closed Date: 9511941 / 1996-03-08 | | | | |
| Site ID: 214717 | | | | |
| Spill Date: 1995-12-21 | | | | |
| REAL ESATE TRANSACTI | 31 BAYLEY AVE | SW 1/8 - 1/4 (0.151 mi.) | 104 | 278 |
| Spill Number/Closed Date: 0707651 / 2013-01-30 | | | | |
| Site ID: 388382 | | | | |
| Spill Date: 2007-10-11 | | | | |
| ***TTF*** | ***78 ST ANDREWS PLACE*** | ***S 1/8 - 1/4 (0.155 mi.)*** | ***Q107*** | ***284*** |
| Spill Number/Closed Date: 0301532 / 2003-06-30 | | | | |
| Spill Number/Closed Date: 0407265 / 2005-05-06 | | | | |
| Site ID: 165750 | | | | |
| Site ID: 252804 | | | | |
| Spill Date: 2003-05-09 | | | | |

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|---|---|---|---|---|
| Spill Date: 2004-09-30 | | | | |
| JACOB DAVID LLC<br>Spill Number/Closed Date: 1400112 / 2014-06-02<br>Site ID: 493340<br>Spill Date: 2014-04-03 | 68 HAMILTON AVE | NE 1/8 - 1/4 (0.160 mi.) | R114 | 318 |
| PHELAN PROPERTY<br>Spill Number/Closed Date: 0800856 / 2008-11-24<br>Site ID: 396679<br>Spill Date: 2008-04-21 | 104 ELLIOT AVE | E 1/8 - 1/4 (0.160 mi.) | S116 | 321 |
| ***POLICE PRECINT #3***<br>Spill Number/Closed Date: 9305296 / 1994-05-24<br>Site ID: 167835<br>Spill Date: 1993-07-26 | ***435 RIVERDALE AVE*** | ***SSW 1/8 - 1/4 (0.161 mi.)*** | ***T118*** | ***324*** |
| NINO CAROZZA<br>Spill Number/Closed Date: 1500515 / 2016-05-10<br>Site ID: 506673<br>Spill Date: 2015-04-15 | 67-69 ELLIOT AVE | ENE 1/8 - 1/4 (0.170 mi.) | W126 | 339 |
| STANGER HOME<br>Spill Number/Closed Date: 0606263 / 2006-12-27<br>Site ID: 369580<br>Spill Date: 2006-08-31 | 30 GRAY PLACE | S 1/8 - 1/4 (0.176 mi.) | Q131 | 347 |
| PREMIER ASSET SERVIC<br>Spill Number/Closed Date: 0902127 / 2009-08-31<br>Site ID: 414159<br>Spill Date: 2009-05-20 | 38 LIVINGSTON AVE | NNE 1/8 - 1/4 (0.188 mi.) | X148 | 380 |
| UNKNOWN<br>Spill Number/Closed Date: 8602879 / 1986-08-08<br>Site ID: 167939<br>Spill Date: 1986-07-31 | 4 POST ROAD | E 1/8 - 1/4 (0.189 mi.) | S150 | 382 |
| PARKSIDE MANAGEMENT<br>Spill Number/Closed Date: 0307504 / 2005-04-10<br>Site ID: 264349<br>Spill Date: 2003-10-16 | 45 HAMILTON AVE | NE 1/8 - 1/4 (0.192 mi.) | R152 | 384 |
| ALMONTE RESIDENCE<br>Spill Number/Closed Date: 0506537 / 2012-08-15<br>Site ID: 351770<br>Spill Date: 2005-08-23 | 33 MORRIS ST | NE 1/8 - 1/4 (0.199 mi.) | R158 | 390 |
| O CONNER HOME<br>Spill Number/Closed Date: 0502485 / 2005-08-28<br>Site ID: 346853<br>Spill Date: 2005-06-01 | 30 ST ANDREWS PLACE | SSE 1/8 - 1/4 (0.207 mi.) | AC173 | 420 |
| BANK OF NEW YORK<br>Spill Number/Closed Date: 0100575 / 2002-04-23<br>Site ID: 87541<br>Spill Date: 2001-04-16 | 410 S BROADWAY | E 1/8 - 1/4 (0.211 mi.) | AD180 | 431 |
| PUBLIC SCHOOL #27<br>Spill Number/Closed Date: 8904052 / 1989-10-13<br>Site ID: 130693<br>Spill Date: 1989-07-24 | PUBLIC SCHOOL #27 | SSW 1/8 - 1/4 (0.230 mi.) | AF231 | 603 |
| PETNUCH RESIDENCE | 445 HAWTHORNE AVE | SW 1/8 - 1/4 (0.246 mi.) | 251 | 701 |

Spill Number/Closed Date: 9416480 / 2005-02-12
Site ID: 252880
Spill Date: 1995-03-21

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|---|---|---|---|---|
| APT BUILDING - PBS T<br>Spill Number/Closed Date: 0710931 / 2008-03-18<br>Site ID: 392311<br>Spill Date: 2008-01-15 | 15 HAMILTON AVE | NNE 1/8 - 1/4 (0.249 mi.) | AM253 | 702 |
| 15 HAMILTON ASSOC<br>Spill Number/Closed Date: 1509950 / 2016-02-18<br>Site ID: 520595<br>Spill Date: 2016-01-06 | 15 HAMILTON AVE | NNE 1/8 - 1/4 (0.249 mi.) | AM254 | 704 |
| APARTMENT<br>Spill Number/Closed Date: 0701095 / 2010-04-09<br>Site ID: 380587<br>Spill Date: 2007-04-26 | 70 RADFORD STREET | SE 1/4 - 1/2 (0.256 mi.) | AG256 | 708 |
| SPILL NUMBER 0007654<br>Spill Number/Closed Date: 0007654 / 2001-04-13<br>Site ID: 230529<br>Spill Date: 2000-09-29 | 340 SOUTH BROADWAY | ENE 1/4 - 1/2 (0.271 mi.) | AH261 | 715 |
| MCGLYNN RESIDENCE<br>Spill Number/Closed Date: 0209618 / 2003-08-22<br>Site ID: 242390<br>Spill Date: 2002-12-18 | 106 VALENTINE LN | SW 1/4 - 1/2 (0.275 mi.) | 262 | 716 |
| APT BUILDING<br>Spill Number/Closed Date: 1206639 / 2013-12-11<br>Site ID: 469645<br>Spill Date: 2012-10-03 | 490 SOUTH BROADWAY | SE 1/4 - 1/2 (0.282 mi.) | AK263 | 717 |
| RESIDENTIAL - TTF<br>Spill Number/Closed Date: 1008078 / 2014-11-05<br>Site ID: 441547<br>Spill Date: 2010-11-01 | 33 RANDOLPH STREET | ESE 1/4 - 1/2 (0.287 mi.) | AQ266 | 722 |
| RESI: GARCIA<br>Spill Number/Closed Date: 9906120 / 1999-11-29<br>Spill Number/Closed Date: 9907016 / 1999-12-09<br>Site ID: 140202<br>Site ID: 140203<br>Spill Date: 1999-08-23<br>Spill Date: 1999-09-13 | 9 LAWRENCE ST | SE 1/4 - 1/2 (0.304 mi.) | AR268 | 725 |
| ***GILROY RESIDENCE***<br>Spill Number/Closed Date: 1006861 / 2011-07-25<br>Site ID: 440240<br>Spill Date: 2010-09-25 | ***45 RADFORD STREET*** | ***ESE 1/4 - 1/2 (0.310 mi.)*** | ***AQ270*** | ***730*** |
| RESIDENCE<br>Spill Number/Closed Date: 0002770 / 2000-11-20<br>Site ID: 331160<br>Spill Date: 2000-06-05 | 42 RANDOLPH STREET | ESE 1/4 - 1/2 (0.313 mi.) | AQ272 | 734 |
| ***T & G SERVICE STATIO***<br>Spill Number/Closed Date: 8806675 / 1995-12-29<br>Site ID: 312644<br>Spill Date: 1988-11-09 | ***310 SOUTH BROADWAY*** | ***NE 1/4 - 1/2 (0.316 mi.)*** | ***AT274*** | ***737*** |
| RESIDENTIAL PBS TTF | 17 PERSHING AVE | S 1/4 - 1/2 (0.318 mi.) | 277 | 741 |

Spill Number/Closed Date: 2100259 / 2021-09-20
Site ID: 617928
Spill Date: 2021-04-09

MUNICIPAL HOUSING AU | 30 WESTERN AVE | ESE 1/4 - 1/2 (0.323 mi.) | AQ279 | 800
Spill Number/Closed Date: 0503269 / 2005-09-11
Site ID: 347844
Spill Date: 2005-06-17

BARTMAN RESIDENCE | 116 BELVEDERE DRIVE | WSW 1/4 - 1/2 (0.329 mi.) | AS280 | 801
Spill Number/Closed Date: 0701331 / 2007-12-05
Spill Number/Closed Date: 0701037 / 2007-12-05
Site ID: 380817
Site ID: 380485
Spill Date: 2007-05-02
Spill Date: 2007-04-25

DEVA LEASING CORP. | 13 LUDLOW STREET | NE 1/4 - 1/2 (0.330 mi.) | AU281 | 804
Spill Number/Closed Date: 9505134 / 1995-07-31
Site ID: 173873
Spill Date: 1995-07-27

YONKERS TREATMENT PL | LUDLOW ST DOCK SOUTH | NE 1/4 - 1/2 (0.332 mi.) | AU283 | 806
Spill Number/Closed Date: 9711043 / 1998-01-02
Site ID: 263187
Spill Date: 1998-01-02

YONKERS TREAT. PLANT | LUDLOW DOCK FACILITY | NE 1/4 - 1/2 (0.333 mi.) | AT285 | 808
Spill Number/Closed Date: 8910956 / 1990-05-16
Site ID: 295201
Spill Date: 1990-02-16

***17 LUDLOW STREET PRO** | **7-17 LUDLOW STREET** | **NE 1/4 - 1/2 (0.337 mi.)** | **AU288** | **814***
Spill Number/Closed Date: 0508586 / 2007-03-05
Site ID: 354197
Spill Date: 2005-10-18

***ICON CONTRACTING GRO** | **36 RADFORD STREET** | **ESE 1/4 - 1/2 (0.343 mi.)** | **AV289** | **817***
Spill Number/Closed Date: 0707661 / 2009-10-07
Spill Number/Closed Date: 0701094 / 2008-09-08
Site ID: 388397
Site ID: 380586
Spill Date: 2007-10-11
Spill Date: 2007-04-26

RESIDENCE | 58 BRUCE ST | SE 1/4 - 1/2 (0.346 mi.) | AR290 | 828
Spill Number/Closed Date: 9507976 / 2012-04-16
Site ID: 220471
Spill Date: 1995-09-28

EISSA - TTF | 65 HIGHLAND AVE | NNE 1/4 - 1/2 (0.369 mi.) | 292 | 831
Spill Number/Closed Date: 1400369 / 2019-01-11
Site ID: 493606
Spill Date: 2014-04-10

***SPILL NUMBER 0205392** | **75 BRUCE AVE** | **SE 1/4 - 1/2 (0.369 mi.)** | **AX293** | **832***
Spill Number/Closed Date: 0205392 / 2002-08-22
Site ID: 149230
Spill Date: 2002-08-22

***APARTMENT - TTF** | **525 RIVERDALE AVE** | **SSW 1/4 - 1/2 (0.372 mi.)** | **294** | **836***
Spill Number/Closed Date: 1407171 / 2017-04-04

Site ID: 500673
Spill Date: 2014-10-08

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|---|---|---|---|---|
| PBS<br>Spill Number/Closed Date: 0403028 / 2007-08-29<br>Site ID: 154308<br>Spill Date: 2004-06-18 | 70 WESTERN AVE | ESE 1/4 - 1/2 (0.379 mi.) | AV295 | 839 |
| APARTMENT BLDG<br>Spill Number/Closed Date: 0507780 / 2005-11-27<br>Site ID: 353264<br>Spill Date: 2005-09-28 | 480 HAWTHORNE AVE | SW 1/4 - 1/2 (0.383 mi.) | 297 | 841 |
| APT HOUSE<br>Spill Number/Closed Date: 9906286 / 2004-06-10<br>Site ID: 296853<br>Spill Date: 1999-08-26 | 85 BRUCE AVE | SE 1/4 - 1/2 (0.390 mi.) | AX300 | 844 |
| MICHAEL - TTF<br>Spill Number/Closed Date: 0805468 / 2013-12-05<br>Site ID: 402572<br>Spill Date: 2008-08-11 | 346 VAN CORTLANDT PA | E 1/4 - 1/2 (0.395 mi.) | 301 | 846 |
| HOUSING PROJECT<br>Spill Number/Closed Date: 0106684 / 2009-08-31<br>Site ID: 187374<br>Spill Date: 2001-09-26 | 76 WESTERN AVE | ESE 1/4 - 1/2 (0.399 mi.) | 303 | 853 |
| ***APT BLDG***<br>Spill Number/Closed Date: 9803514 / 1999-01-20<br>Site ID: 252581<br>Spill Date: 1998-06-18 | ***260 SOUTH BROADWAY*** | ***NE 1/4 - 1/2 (0.400 mi.)*** | ***BA304*** | ***855*** |
| SHETH HOME<br>Spill Number/Closed Date: 0711326 / 2008-04-21<br>Site ID: 392787<br>Spill Date: 2008-01-28 | 20 LEHMAN TERRACE | S 1/4 - 1/2 (0.408 mi.) | 307 | 864 |
| ***APT BLDG***<br>Spill Number/Closed Date: 0812751 / 2009-04-14<br>Site ID: 410387<br>Spill Date: 2009-02-23 | ***15 RADFORD STREET*** | ***ESE 1/4 - 1/2 (0.424 mi.)*** | ***BB314*** | ***889*** |
| ***APT BUILDING UST***<br>Spill Number/Closed Date: 1215623 / 2014-03-05<br>Site ID: 478948<br>Spill Date: 2013-02-11 | ***16 CORNELL AVE*** | ***ESE 1/4 - 1/2 (0.427 mi.)*** | ***316*** | ***892*** |
| MR RICHARD MOORE<br>Spill Number/Closed Date: 9709212 / 1997-11-17<br>Site ID: 70956<br>Spill Date: 1997-11-05 | 3 UNDERCLIFF ST | NE 1/4 - 1/2 (0.430 mi.) | BA317 | 894 |
| ST DENNIS CHURCH<br>Spill Number/Closed Date: 0206989 / 2003-02-04<br>Site ID: 120157<br>Spill Date: 2002-10-04 | 470 VAN CORTLAND PAR | ESE 1/4 - 1/2 (0.434 mi.) | BB319 | 911 |
| RESIDENTIAL - TTF<br>Spill Number/Closed Date: 1200369 / 2013-02-08<br>Site ID: 462996<br>Spill Date: 2012-04-12 | 106 UNDERCLIFF ST | ENE 1/4 - 1/2 (0.440 mi.) | 320 | 912 |
| SPILL NUMBER 0209043 | 99 ALTA AVE | NE 1/4 - 1/2 (0.441 mi.) | BC321 | 913 |

Spill Number/Closed Date: 0209043 / 2004-07-06
Site ID: 282162
Spill Date: 2002-12-03

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|---|---|---|---|---|
| ***185 - 187 RIVERDALE*** | ***185 RIVERDALE AVENUE*** | ***N 1/4 - 1/2 (0.449 mi.)*** | ***323*** | ***934*** |
| Spill Number/Closed Date: 0313176 / 2005-01-05<br>Site ID: 175695<br>Spill Date: 2004-02-24 | | | | |
| YOUNG ADULT INSTITUT | 1 ROSE LANE | NE 1/4 - 1/2 (0.463 mi.) | BC324 | 958 |
| Spill Number/Closed Date: 0300812 / 2003-10-21<br>Site ID: 147648<br>Spill Date: 2003-04-23 | | | | |
| MCGWYNE - TTF | 497 VAN CORTLANDT PA | ESE 1/4 - 1/2 (0.465 mi.) | BD325 | 959 |
| Spill Number/Closed Date: 1809816 / 2022-03-31<br>Spill Number/Closed Date: 1609924 / 2018-12-24<br>Site ID: 580682<br>Site ID: 538738<br>Spill Date: 2018-12-21<br>Spill Date: 2017-01-27 | | | | |
| RIVERVIEW GARDEN COU | 100 HIGHLAND AVE | NNE 1/4 - 1/2 (0.470 mi.) | 326 | 962 |
| Spill Number/Closed Date: 9413381 / 1995-01-19<br>Site ID: 287788<br>Spill Date: 1995-01-07 | | | | |
| ***ST. DENNIS SCHOOL*** | ***73 LAWRENCE STREET*** | ***ESE 1/4 - 1/2 (0.472 mi.)*** | ***BE327*** | ***963*** |
| Spill Number/Closed Date: 0209828 / 2002-12-27<br>Site ID: 318693<br>Spill Date: 2002-12-27 | | | | |
| APARTMENT BLDG | 80 SARATOGA AVE | SE 1/4 - 1/2 (0.472 mi.) | BF328 | 968 |
| Spill Number/Closed Date: 0602430 / 2006-07-30<br>Site ID: 364905<br>Spill Date: 2006-06-02 | | | | |
| LAWRENCE | 73 ST | ESE 1/4 - 1/2 (0.474 mi.) | BE329 | 970 |
| Spill Number/Closed Date: 8706940 / 1995-02-14<br>Site ID: 111338<br>Spill Date: 1987-11-14 | | | | |
| ***MOUNT SAINT VINCENT*** | ***6301 RIVERDALE AVENU*** | ***SSW 1/4 - 1/2 (0.477 mi.)*** | ***BG330*** | ***971*** |
| Spill Number/Closed Date: 0303272 / 2004-07-27<br>Spill Number/Closed Date: 0301515 / 2005-03-28<br>Spill Number/Closed Date: 0485243 / 2007-11-13<br>Site ID: 138624<br>Site ID: 232413<br>Site ID: 334385<br>Spill Date: 2003-06-27<br>Spill Date: 2003-05-12<br>Spill Date: 2004-11-29 | | | | |
| ***COLLEGE OF MT ST VIN*** | ***6301 RIVERDALE AVE*** | ***SSW 1/4 - 1/2 (0.477 mi.)*** | ***BG331*** | ***997*** |
| Spill Number/Closed Date: 0807008 / 2010-01-22<br>Spill Number/Closed Date: 0807009 / 2008-10-28<br>Site ID: 404321<br>Site ID: 404322<br>Spill Date: 2008-09-22 | | | | |
| SPILL NUMBER 9807402 | 88-90 SARATOGA AVE | SE 1/4 - 1/2 (0.492 mi.) | BF332 | 1003 |

Spill Number/Closed Date: 9807402 / 1998-12-30
Site ID: 180428
Spill Date: 1998-09-15

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|---|---|---|---|---|
| SPILL NUMBER 9808503<br>Spill Number/Closed Date: 9808503 / 2004-04-30<br>Site ID: 104582<br>Spill Date: 1998-10-08 | 88 AND 90 SARATOGA A | SE 1/4 - 1/2 (0.492 mi.) | BF333 | 1005 |
| YONKERS MOTORS<br>Spill Number/Closed Date: 9304771 / 1995-02-17<br>Site ID: 330549<br>Spill Date: 1993-07-15 | 210 SOUTH BROADWAY | NNE 1/4 - 1/2 (0.495 mi.) | 334 | 1006 |
| APARTMENT BLDG - TTF<br>Spill Number/Closed Date: 1604887 / 2019-03-07<br>Site ID: 531413<br>Spill Date: 2016-08-11 | 502 VAN CORTLANDT PA | ESE 1/4 - 1/2 (0.496 mi.) | 335 | 1008 |
| ***DELLOS SANTOS TTF***<br>Spill Number/Closed Date: 1201227 / 2012-09-10<br>Site ID: 463907<br>Spill Date: 2012-05-07 | ***54 CAROLINE AVE*** | ***NNE 1/4 - 1/2 (0.499 mi.)*** | ***336*** | ***1009*** |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| SPILL NUMBER 9810759<br>Spill Number/Closed Date: 9810759 / 2000-01-12<br>Site ID: 236973<br>Spill Date: 1998-11-24 | 96 PURSER PLACE | WSW 0 - 1/8 (0.047 mi.) | B19 | 135 |
| TAUB-SILVA RESIDENCE<br>Spill Number/Closed Date: 1203009 / 2012-10-03<br>Site ID: 465795<br>Spill Date: 2012-06-26 | 104 PURSER PLACE | WSW 0 - 1/8 (0.052 mi.) | B21 | 137 |
| ***YONKERS PUBLIC SCHOO***<br>Spill Number/Closed Date: 9402336 / 1994-05-24<br>Site ID: 88195<br>Spill Date: 1994-05-17 | ***348 HAWTHORNE AVE*** | ***W 0 - 1/8 (0.078 mi.)*** | ***G31*** | ***156*** |
| BATISTA - TTF<br>Spill Number/Closed Date: 1903379 / 2019-10-23<br>Site ID: 591337<br>Spill Date: 2019-07-02 | 56 CULVER ST | WSW 0 - 1/8 (0.082 mi.) | G34 | 163 |
| SPILL NUMBER 9512116<br>Spill Number/Closed Date: 9512116 / 1996-01-02<br>Site ID: 73150<br>Spill Date: 1995-12-27 | 8 PURSER PL | NNW 1/8 - 1/4 (0.183 mi.) | 139 | 360 |
| BYRNE - TTF<br>Spill Number/Closed Date: 1304519 / 2014-01-27<br>Site ID: 485044<br>Spill Date: 2013-07-25 | 58 BEECHWOOD TERRACE | WNW 1/8 - 1/4 (0.211 mi.) | AB182 | 434 |
| RESIDENCE<br>Spill Number/Closed Date: 0411382 / 2005-01-20<br>Site ID: 336567<br>Spill Date: 2005-01-20 | 30 FAIRFIELD PLACE | WNW 1/8 - 1/4 (0.222 mi.) | AB217 | 563 |
| 252 HAWTHORNE AVENUE | 252 HAWTHORNE AVENUE | NNW 1/4 - 1/2 (0.264 mi.) | AN258 | 710 |

Spill Number/Closed Date: 0110933 / 2002-04-11
Site ID: 289223
Spill Date: 2002-02-15

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|---|---|---|---|---|
| ***YONKERS STP*** | ***LUDLOW STREET*** | ***N 1/4 - 1/2 (0.270 mi.)*** | ***AO259*** | ***711*** |
| Spill Number/Closed Date: 9308186 / 2005-02-12<br>Site ID: 326720<br>Spill Date: 1993-09-29 | | | | |
| CABREA | 39 PIER STREET | NNW 1/4 - 1/2 (0.271 mi.) | AP260 | 714 |
| Spill Number/Closed Date: 8809475 / 1989-03-09<br>Site ID: 89634<br>Spill Date: 1989-03-08 | | | | |
| COMMERCIAL PROPERTY | 117 LUDLOW STREET | N 1/4 - 1/2 (0.286 mi.) | AO264 | 718 |
| Spill Number/Closed Date: 9107610 / 1991-11-19<br>Spill Number/Closed Date: 0904290 / 2009-09-10<br>Site ID: 293237<br>Site ID: 416441<br>Spill Date: 1991-10-16<br>Spill Date: 2009-07-13 | | | | |
| APARTMENT BUILDING | 117- 119 LUDLOW ST | N 1/4 - 1/2 (0.286 mi.) | AO265 | 721 |
| Spill Number/Closed Date: 0501524 / 2009-09-10<br>Site ID: 345694<br>Spill Date: 2005-05-05 | | | | |
| SOTO HOME | 69 SUNNYSIDE DRIVE | WNW 1/4 - 1/2 (0.288 mi.) | 267 | 724 |
| Spill Number/Closed Date: 0608986 / 2006-11-07<br>Site ID: 373079<br>Spill Date: 2006-11-06 | | | | |
| ***COLER HOLDING*** | ***166 LUDLOW STREET*** | ***NNW 1/4 - 1/2 (0.309 mi.)*** | ***AP269*** | ***727*** |
| Spill Number/Closed Date: 0106279 / 2002-01-15<br>Spill Number/Closed Date: 9414453 / 1995-02-03<br>Site ID: 153548<br>Site ID: 302819<br>Spill Date: 2001-09-14<br>Spill Date: 1995-02-01 | | | | |
| ***SADIN HOME*** | ***112 BELVEDERE DRIVE*** | ***WSW 1/4 - 1/2 (0.311 mi.)*** | ***AS271*** | ***732*** |
| Spill Number/Closed Date: 0501178 / 2012-08-14<br>Site ID: 344343<br>Spill Date: 2005-04-28 | | | | |
| MZ MOVERS | 231 HAWTHORNE AVE | NNW 1/4 - 1/2 (0.313 mi.) | 273 | 736 |
| Spill Number/Closed Date: 0101254 / 2002-02-11<br>Site ID: 248459<br>Spill Date: 2001-05-02 | | | | |
| BARTMAN HOME | 110 SUNNYSIDE DRIVE | W 1/4 - 1/2 (0.332 mi.) | AS284 | 807 |
| Spill Number/Closed Date: 0704957 / 2013-01-30<br>Site ID: 385206<br>Spill Date: 2007-08-01 | | | | |
| PARK LINCOLN MERC | 55 KNOWLES ST | NNW 1/4 - 1/2 (0.368 mi.) | AW291 | 830 |
| Spill Number/Closed Date: 8807868 / 2005-04-30<br>Site ID: 198033<br>Spill Date: 1988-12-28 | | | | |
| ST. PETERS SCHOOL | 204 HAWTHORNE AVE | NNW 1/4 - 1/2 (0.381 mi.) | AY296 | 840 |
| Spill Number/Closed Date: 8704566 / 1987-10-21 | | | | |

Site ID: 114871
Spill Date: 1987-09-01

***YONKERS CITY GARAGE*** ***152 DOWNING STREET*** ***NNW 1/4 - 1/2 (0.412 mi.)*** ***AY312*** ***875***
Spill Number/Closed Date: 9004549 / 1990-07-24
Spill Number/Closed Date: 8911079 / 1992-09-16
Site ID: 275491
Site ID: 85694
Spill Date: 1990-07-24
Spill Date: 1990-02-21

CASTLE OIL TERM. ASHBURN & ELM ST NW 1/4 - 1/2 (0.425 mi.) AZ315 891
Spill Number/Closed Date: 8909993 / 1990-03-07
Site ID: 110068
Spill Date: 1990-01-18

***YONKERS WASTE WATER*** ***1 FERNBROOK ST*** ***NW 1/4 - 1/2 (0.431 mi.)*** ***AZ318*** ***896***
Spill Number/Closed Date: 1902502 / 2022-10-26
Site ID: 590427
Spill Date: 2019-06-10

***Lists of state and tribal registered storage tanks***

NY UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database

A review of the NY UST list, as provided by EDR, has revealed that there are 24 NY UST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| DEVONSHIRE 2010 INC. | 390 RIVERDALE AVENUE | SSE 0 - 1/8 (0.033 mi.) | C16 | 131 |
| Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026<br>Status: 4. Closed - in place<br>Id/Status:: 3-138045<br>Site Status: Active | | | | |
| JOHN E. FLYNN MANOR | 334 RIVERDALE AVENUE | NNW 0 - 1/8 (0.065 mi.) | D26 | 145 |
| Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026<br>Status: 4. Closed - in place<br>Id/Status:: 3-600082<br>Site Status: Unregulated | | | | |
| 14 BAYLEY ASSOCIATES | 14 BAYLEY AVENUE | SW 0 - 1/8 (0.096 mi.) | E41 | 171 |
| Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026<br>Status: 3. Closed - Removed<br>Id/Status:: 3-801788<br>Site Status: Unregulated | | | | |
| ACCURATE PLASTICS, I | 18 MORRIS PLACE | NE 0 - 1/8 (0.099 mi.) | J50 | 183 |
| Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>Id/Status:: 3-800432<br>Site Status: Active | | | | |
| RIVERDALE BP | 416 RIVERDALE AVE. | SSW 0 - 1/8 (0.116 mi.) | L63 | 220 |
| Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026 | | | | |

Status: 0. Administratively closed
Id/Status:: 3-497614
Site Status: Administratively Closed

154 RADFORD AVE APT | 154 RADFORD AVENUE | S 0 - 1/8 (0.117 mi.) | I68 | 225
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 3. Closed - Removed
Id/Status:: 3-801773
Site Status: Active

SAMAN B NEMEH | 69 HAMILTON AVE | NE 1/8 - 1/4 (0.131 mi.) | J76 | 238
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 3. Closed - Removed
Id/Status:: 3-800094
Site Status: Unregulated: <1101 gal. PBS

125 HOLDING LLC | 125 ELLIOTT AVENUE | ESE 1/8 - 1/4 (0.132 mi.) | P82 | 246
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 4. Closed - in place
Id/Status:: 3-164747
Site Status: Active

DOMINO TRANSPORT SER | 308 RIVERDALE AVE | N 1/8 - 1/4 (0.134 mi.) | K83 | 247
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 3. Closed - Removed
Id/Status:: 3-600389
Site Status: Unregulated

CONGREGATION KOLLEL | 155-157 ELLIOT AVENU | SE 1/8 - 1/4 (0.144 mi.) | P96 | 264
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 1. In-Service
Id/Status:: 3-800777
Site Status: Active

78 LANA REALTY LLC | 78 ST ANDREWS PLACE | S 1/8 - 1/4 (0.155 mi.) | Q106 | 281
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 3. Closed - Removed
Status: 1. In-Service
Id/Status:: 3-800464
Site Status: Unregulated: <1101 gal. PBS

THIRD POLICE PRECINC | 435 RIVERDALE AVENUE | SSW 1/8 - 1/4 (0.161 mi.) | T119 | 326
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 1. In-Service
Id/Status:: 3-600673
Site Status: Active

EUGENIO MARIA DE HOS | 75 MORRIS STREET | N 1/8 - 1/4 (0.168 mi.) | V124 | 333
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 1. In-Service
Id/Status:: 3-600422
Site Status: Active

HLJ OF N.Y. INC. | 67-69 ELLIOTT AVENUE | ENE 1/8 - 1/4 (0.170 mi.) | W127 | 340
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 3. Closed - Removed
Id/Status:: 3-802006
Site Status: Unregulated

MIKEVIN MANAGEMENT I | 30 GRAY PLACE | S 1/8 - 1/4 (0.176 mi.) | Q132 | 348
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026

Status: 3. Closed - Removed
Id/Status:: 3-800983
Site Status: Unregulated: <1101 gal. PBS

95 RADFORD REALTY CO | 95 RADFORD STREET | SE 1/8 - 1/4 (0.189 mi.) | U149 | 381
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 1. In-Service
Id/Status:: 3-600815
Site Status: Active

45 MORRIS STREET ASS | 45 MORRIS STREET | NNE 1/8 - 1/4 (0.190 mi.) | X151 | 383
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 0. Administratively closed
Id/Status:: 3-800091
Site Status: Administratively Closed

280 DOBBS FERRY ROAD | 461 RIVERDALE AVENUE | SSW 1/8 - 1/4 (0.201 mi.) | T161 | 394
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 4. Closed - in place
Id/Status:: 3-449768
Site Status: Unregulated

THE BANK OF NEW YORK | 410 SOUTH BROADWAY | E 1/8 - 1/4 (0.211 mi.) | AD181 | 433
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 3. Closed - Removed
Id/Status:: 3-078980
Site Status: Unregulated: <1101 gal. PBS

***VALENTINE LANE ASSOC | 200 VALENTINE LANE | S 1/8 - 1/4 (0.227 mi.) | AE226 | 591***
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 3. Closed - Removed
Id/Status:: 3-600006
Site Status: Active

FRANKLIN RESIDENCE | 104 FRANKLIN AVENUE | W 1/8 - 1/4 (0.240 mi.) | 245 | 657
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 3. Closed - Removed
Status: 0. Administratively closed
Id/Status:: 3-800995
Site Status: Unregulated

RENEE BURKE MANOR | 15 HAMILTON AVENUE | NNE 1/8 - 1/4 (0.249 mi.) | AM252 | 702
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 1. In-Service
Id/Status:: 3-411655
Site Status: Active

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|

YONKERS FUEL INC. | 380 RIVERDALE AVENUE | SSW 0 - 1/8 (0.018 mi.) | A8 | 99
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026
Status: 1. In-Service
Status: 3. Closed - Removed
Id/Status:: 3-800744
Site Status: Active

PEARLS HAWTHORNE SCH | 348 HAWTHORNE AVENUE | W 0 - 1/8 (0.078 mi.) | G29 | 149
Database: WESTCHESTER CO. UST, Date of Government Version: 01/28/2026

NY MOSF: These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

A review of the NY MOSF list, as provided by EDR, and dated 12/05/2025 has revealed that there are 2 NY MOSF sites within approximately 0.5 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***AMERICAN SUGAR REFIN*** | ***ONE FEDERAL STREET*** | ***NW 1/4 - 1/2 (0.384 mi.)*** | ***AZ298*** | ***843*** |
| Tank Status: Active<br>Facility Id: 3-2320 | | | | |
| ***A. TARRICONE INC.*** | ***FOOT OF LUDLOW STREE*** | ***NW 1/4 - 1/2 (0.416 mi.)*** | ***313*** | ***881*** |
| Tank Status: Inactive<br>Facility Id: 3-2220 | | | | |

NY AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database.

A review of the NY AST list, as provided by EDR, has revealed that there are 29 NY AST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***SAFEGUARD RIVERDALE*** | ***390 RIVERDALE AVENUE*** | ***SSE 0 - 1/8 (0.033 mi.)*** | ***C14*** | ***121*** |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>Status: 3. Closed - Removed<br>PBS Number: 3-138045 | | | | |
| FIVE GRAND INC. | 402-404 RIVERDALE AV | SSW 0 - 1/8 (0.063 mi.) | E23 | 140 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-183601 | | | | |
| CRP RIVERDALE LLC | 402-404 RIVERDALE AV | SSW 0 - 1/8 (0.063 mi.) | E24 | 141 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-800915 | | | | |
| LIVINGSTON REALTY AS | 145 LIVINGSTON AVE | SSE 0 - 1/8 (0.070 mi.) | C28 | 148 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-164755 | | | | |
| APARTMENT BUILDING | 163 RADFORD STREET | S 0 - 1/8 (0.084 mi.) | E35 | 164 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-801190 | | | | |
| 167-171 RADFORD STRE | 167-171 RADFORD STRE | S 0 - 1/8 (0.086 mi.) | E36 | 165 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Database: AST, Date of Government Version: 12/05/2025<br>Status: 1. In-Service<br>PBS Number: 3-800574<br>Facility Id: 2-603513 | | | | |
| 159 RADFORD LLC | 159 RADFORD STREET | S 0 - 1/8 (0.086 mi.) | E38 | 168 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service | | | | |

PBS Number: 3-180068

| | | | | |
|---|---|---|---|---|
| 145 RS LLC | 145 RADFORD STREET | SSE 0 - 1/8 (0.095 mi.) | I39 | 169 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-802157 | | | | |
| 154 RADFORD AVE APT | 154 RADFORD AVENUE | S 0 - 1/8 (0.117 mi.) | I67 | 224 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-801773 | | | | |
| GRAY PLACE MANAGEMEN | 10 GRAY PLACE | S 1/8 - 1/4 (0.127 mi.) | I70 | 227 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-800870 | | | | |
| POST STREET REVOCABL | 26-30 POST STREET | E 1/8 - 1/4 (0.132 mi.) | O79 | 244 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-103926 | | | | |
| 125 HOLDING LLC | 125 ELLIOTT AVENUE | ESE 1/8 - 1/4 (0.132 mi.) | P81 | 245 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-164747 | | | | |
| GSB HAMILTON LLC | 84-86 HAMILTON AVENU | ENE 1/8 - 1/4 (0.135 mi.) | J84 | 251 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-292400 | | | | |
| 85 SAINT ANDREWS PLA | 85 SAINT ANDREWS PLA | S 1/8 - 1/4 (0.142 mi.) | L90 | 258 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-601213 | | | | |
| P.J. PROPERTIES | 78 HAMILTON AVENUE | ENE 1/8 - 1/4 (0.143 mi.) | J92 | 261 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-800430 | | | | |
| 432 RIVERDALE APARTM | 432 RIVERDALE AVENUE | SSW 1/8 - 1/4 (0.144 mi.) | L93 | 262 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-600896 | | | | |
| CONGREGATION KOLLEL | 155-157 ELLIOT AVENU | SE 1/8 - 1/4 (0.144 mi.) | P95 | 263 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 0. Administratively closed<br>PBS Number: 3-800777 | | | | |
| SOUTH BROADWAY, INC. | 381 SOUTH BROADWAY | ENE 1/8 - 1/4 (0.192 mi.) | Y153 | 385 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 1. In-Service<br>PBS Number: 3-601184 | | | | |
| LORDAE PROPERTY MANA | 393 SOUTH BROADWAY | E 1/8 - 1/4 (0.194 mi.) | S154 | 386 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026<br>Status: 3. Closed - Removed<br>PBS Number: 3-801434 | | | | |
| 450 RIVERDALE AVE LL | 450 RIVERDALE AVE | SSW 1/8 - 1/4 (0.197 mi.) | T156 | 388 |
| Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026 | | | | |

Status: 3. Closed - Removed
PBS Number: 3-802077

1 POST STREET | 1 POST STREET | E 1/8 - 1/4 (0.201 mi.) | Y162 | 395
Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026
Status: 1. In-Service
PBS Number: 3-801032

373 SOUTH BROADWAY | 373 SOUTH BROADWAY | ENE 1/8 - 1/4 (0.202 mi.) | Y170 | 412
Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026
Status: 1. In-Service
PBS Number: 3-601185

***VALENTINE LANE ASSOC | 200 VALENTINE LANE | S 1/8 - 1/4 (0.227 mi.) | AE226 | 591***
Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026
Status: 1. In-Service
PBS Number: 3-600006

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|

***YONKERS PUBLIC SCHOO | 348 HAWTHORNE AVE | W 0 - 1/8 (0.078 mi.) | G31 | 156***
Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026
Status: 1. In-Service
PBS Number: 3-413534

110 MORRIS STREET | 110 MORRIS STREET | NNW 1/8 - 1/4 (0.141 mi.) | M88 | 256
Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026
Status: 1. In-Service
PBS Number: 3-139319

JOBO REALTY, LLC | 285 HAWTHORNE AVENUE | NNW 1/8 - 1/4 (0.198 mi.) | Z157 | 389
Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026
Status: 1. In-Service
PBS Number: 3-104833

J.R. PROPERTIES OF Y | 271-273 HAWTHORNE AV | NNW 1/8 - 1/4 (0.215 mi.) | Z210 | 522
Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026
Status: 1. In-Service
PBS Number: 3-600881

PALAZZO ENTERPRISES, | 267-269 HAWTHORNE AV | NNW 1/8 - 1/4 (0.238 mi.) | Z242 | 652
Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026
Status: 1. In-Service
PBS Number: 3-104892

34 PIER STREET | 34 PIER STREET | NNW 1/8 - 1/4 (0.243 mi.) | Z246 | 658
Database: WESTCHESTER CO. AST, Date of Government Version: 01/28/2026
Status: 1. In-Service
PBS Number: 3-412740

NY MOSF AST: Major Oil Storage Facilities Database. Facilities are licensed pursuant to Article 12 of the Navigation Law, 6 NYCRR Part 610 and 17 NYCRR Part 30. These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater. Includes MOSF's licensed or closed since April 1, 1986, (responsibility was transferred from DOT on October 13, 1985) plus available data obtained from DOT facilities licensed since Article 12 became law on April 1, 1978.

A review of the NY MOSF AST list, as provided by EDR, and dated 01/01/2002 has revealed that there is 1 NY MOSF AST site within approximately 0.5 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***A. TARRICONE INC.*** | ***FOOT OF LUDLOW STREE*** | ***NW 1/4 - 1/2 (0.416 mi.)*** | ***313*** | ***881*** |
| Facility Status: 2 | | | | |
| Facility Status: 1 | | | | |

***State and tribal institutional control / engineering control registries***

NY ENG CONTROLS: Environmental Remediation sites that have engineering controls in place.

A review of the NY ENG CONTROLS list, as provided by EDR, and dated 10/30/2025 has revealed that there are 2 NY ENG CONTROLS sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***46-70 MCLEAN AVENUE*** | ***48 MCLEAN AVENUE (F/*** | ***E 1/4 - 1/2 (0.319 mi.)*** | ***278*** | ***742*** |
| Site Code: 615469 | | | | |
| ***185 - 187 RIVERDALE*** | ***185 RIVERDALE AVENUE*** | ***N 1/4 - 1/2 (0.449 mi.)*** | ***323*** | ***934*** |
| Site Code: 59028 | | | | |

Environmental Remediation sites that have institutional controls in place.

A review of the NY INST CONTROL list, as provided by EDR, and dated 10/30/2025 has revealed that there are 2 NY INST CONTROL sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***46-70 MCLEAN AVENUE*** | ***48 MCLEAN AVENUE (F/*** | ***E 1/4 - 1/2 (0.319 mi.)*** | ***278*** | ***742*** |
| Site Code: 615469 | | | | |
| ***185 - 187 RIVERDALE*** | ***185 RIVERDALE AVENUE*** | ***N 1/4 - 1/2 (0.449 mi.)*** | ***323*** | ***934*** |
| Site Code: 59028 | | | | |

***Lists of state and tribal voluntary cleanup sites***

NY VCP: Voluntary Cleanup Agreements. The voluntary remedial program uses private monies to get contaminated sites remediated to levels allowing for the sites' productive use. The program covers virtually any kind of site and contamination.

A review of the NY VCP list, as provided by EDR, has revealed that there is 1 NY VCP site within approximately 0.5 miles of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***CE- LUDLOW ST-YONKER*** | ***162 DOWNING STREET*** | ***NNW 1/4 - 1/2 (0.411 mi.)*** | ***AY308*** | ***865*** |
| Database: VCP, Date of Government Version: 10/30/2025 | | | | |
| Site Code: 57099 | | | | |

***Lists of state and tribal brownfield sites***

NY BROWNFIELDS: Brownfields Site List

A review of the NY BROWNFIELDS list, as provided by EDR, and dated 10/30/2025 has revealed that there are 5 NY BROWNFIELDS sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***46-70 MCLEAN AVENUE*** Site Code: 615469 | ***48 MCLEAN AVENUE (F/*** | ***E 1/4 - 1/2 (0.319 mi.)*** | ***278*** | ***742*** |
| LUDLOW COMMONS Site Code: 338579 | 7 LUDLOW STREET | NE 1/4 - 1/2 (0.337 mi.) | AU286 | 809 |
| ***185 - 187 RIVERDALE*** Site Code: 59028 | ***185 RIVERDALE AVENUE*** | ***N 1/4 - 1/2 (0.449 mi.)*** | ***323*** | ***934*** |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| FORMER LUDLOW STREET Site Code: 545355 | 150 DOWNING, 55 & 58 | NNW 1/4 - 1/2 (0.399 mi.) | AW302 | 847 |
| ***FERNBROOK PARK & COM*** Site Code: 680038 | ***70 FERNBROOK STREET*** | ***NW 1/4 - 1/2 (0.404 mi.)*** | ***AZ305*** | ***859*** |

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 12/02/2025 has revealed that there is 1 US BROWNFIELDS site within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| GETTY SQUARE BRANCH | 52 LAWRENCE STREET | SE 1/4 - 1/2 (0.446 mi.) | BD322 | 915 |

***Records of Emergency Release Reports***

NY Spills: Data collected on spills reported to NYSDEC. is required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

A review of the NY Spills list, as provided by EDR, and dated 10/30/2025 has revealed that there are 23 NY Spills sites within approximately 0.125 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| LEWIS PROPERTY | 10 CULVER STREET | SSE 0 - 1/8 (0.015 mi.) | A6 | 98 |

Spill Number/Closed Date: 9101603 / 1991-05-15
Site ID: 235186
Spill Date: 1991-04-26

| | | | | |
|---|---|---|---|---|
| ***SAFEGUARD RIVERDALE*** | ***390 RIVERDALE AVENUE*** | ***SSE 0 - 1/8 (0.033 mi.)*** | ***C14*** | ***121*** |

Spill Number/Closed Date: 1007244 / 2011-01-26
Spill Number/Closed Date: 2003284 / 2023-11-22
Site ID: 440641
Site ID: 609007
Spill Date: 2010-10-06
Spill Date: 2020-07-24

| | | | | |
|---|---|---|---|---|
| YONKERS MUNI.HOUSE A | RIVERDALE AVE & POST | NNW 0 - 1/8 (0.036 mi.) | D17 | 133 |

Spill Number/Closed Date: 9314274 / 1994-03-10
Site ID: 129809
Spill Date: 1994-03-07

| | | | | |
|---|---|---|---|---|
| RIVERDALE AV | AND POST ST | NNW 0 - 1/8 (0.039 mi.) | D18 | 134 |

Spill Number/Closed Date: 0112161 / 2002-03-26
Site ID: 159885
Spill Date: 2002-03-26

| | | | | |
|---|---|---|---|---|
| ***FLYNN MANNOR*** | ***334 RIVERDALE AVE*** | ***NNW 0 - 1/8 (0.065 mi.)*** | ***D25*** | ***141*** |

Spill Number/Closed Date: 1108612 / Not Reported
Spill Number/Closed Date: 1101971 / 2011-06-06
Site ID: 456353
Site ID: 449451
Spill Date: 2011-10-07
Spill Date: 2011-05-23

| | | | | |
|---|---|---|---|---|
| ROSARIO - UST | 15 CLIFF AVE | E 0 - 1/8 (0.067 mi.) | F27 | 147 |

Spill Number/Closed Date: 1503602 / 2015-08-17
Site ID: 509913
Spill Date: 2015-07-02

| | | | | |
|---|---|---|---|---|
| MR RAPICKI | 49 CLIFF AVE | SE 0 - 1/8 (0.082 mi.) | H32 | 160 |

Spill Number/Closed Date: 9206795 / 1992-09-15
Site ID: 293197
Spill Date: 1992-09-12

| | | | | |
|---|---|---|---|---|
| PRIVATE RESIDENCE | 159 RADFORD STREET | S 0 - 1/8 (0.086 mi.) | E37 | 167 |

Spill Number/Closed Date: 9007911 / 1990-11-26
Site ID: 238578
Spill Date: 1990-10-19

| | | | | |
|---|---|---|---|---|
| MANHOLE 450 | RADFORD ST / SO. BRO | SSW 0 - 1/8 (0.096 mi.) | E40 | 170 |

Spill Number/Closed Date: 0005617 / 2004-10-22
Site ID: 60965
Spill Date: 2000-08-10

| | | | | |
|---|---|---|---|---|
| PC PLUMBING | 14 BAYLEY AVE | SW 0 - 1/8 (0.096 mi.) | E42 | 172 |

Spill Number/Closed Date: 1206527 / 2012-10-25
Site ID: 469530
Spill Date: 2012-10-02

| | | | | |
|---|---|---|---|---|
| ACCURATE PLASTICS IN | 18 MORRIS PLACE (AKA | NE 0 - 1/8 (0.099 mi.) | J51 | 184 |

Spill Number/Closed Date: 2109571 / 2022-07-20
Site ID: 631590
Spill Date: 2022-02-09

| | | | | |
|---|---|---|---|---|
| TM 1100 | HAMILTON AVE & POST | ENE 0 - 1/8 (0.107 mi.) | F58 | 196 |

Spill Number/Closed Date: 0001640 / 2000-05-10

Site ID: 71043
Spill Date: 2000-05-09

| | | | | |
|---|---|---|---|---|
| WALKER - UST | 63 CLIFF AVE | SSE 0 - 1/8 (0.108 mi.) | H59 | 197 |
| Spill Number/Closed Date: 1903653 / 2019-12-04<br>Spill Number/Closed Date: 1809544 / 2019-10-08<br>Site ID: 591623<br>Site ID: 580393<br>Spill Date: 2019-07-10<br>Spill Date: 2018-11-29 | | | | |
| ***COSMETIC CAR CARE IN*** | ***320 RIVERDALE AVE*** | ***N 0 - 1/8 (0.108 mi.)*** | ***K60*** | ***199*** |
| Spill Number/Closed Date: 0902156 / 2009-07-21<br>Site ID: 414191<br>Spill Date: 2009-05-22 | | | | |
| JOB SITE | 416 RIVERDALE AVE | SSW 0 - 1/8 (0.116 mi.) | L61 | 218 |
| Spill Number/Closed Date: 9605985 / 1996-08-08<br>Site ID: 306528<br>Spill Date: 1996-08-08 | | | | |
| GAS STATION | 416-418 RIVERDALE AV | SSW 0 - 1/8 (0.116 mi.) | L62 | 219 |
| Spill Number/Closed Date: 9605951 / Not Reported<br>Site ID: 245979<br>Spill Date: 1996-08-06 | | | | |
| ABOVE GROUND TANK RE | 154 RADFORD AVE | S 0 - 1/8 (0.117 mi.) | I66 | 223 |
| Spill Number/Closed Date: 1202260 / 2013-05-01<br>Site ID: 465014<br>Spill Date: 2012-06-06 | | | | |

| **Lower Elevation** | **Address** | **Direction / Distance** | **Map ID** | **Page** |
|---|---|---|---|---|
| CITGO STATION | 380 RIVERDALE AVE | SSW 0 - 1/8 (0.018 mi.) | A9 | 102 |
| Spill Number/Closed Date: 0202712 / Not Reported<br>Spill Number/Closed Date: 0608110 / Not Reported<br>Spill Number/Closed Date: 0110501 / 2002-02-01<br>Site ID: 113333<br>Site ID: 371999<br>Site ID: 251974<br>Spill Date: 2002-06-13<br>Spill Date: 2006-10-16<br>Spill Date: 2002-02-01 | | | | |
| CONOCO STATION | 380 RIVERDALE AVE | SSW 0 - 1/8 (0.018 mi.) | A11 | 117 |
| Spill Number/Closed Date: 1804210 / Not Reported<br>Site ID: 573876<br>Spill Date: 2018-07-18 | | | | |
| ***YONKERS PUBLIC SCHOO*** | ***348 HAWTHORNE AVE*** | ***W 0 - 1/8 (0.078 mi.)*** | ***G31*** | ***156*** |
| Spill Number/Closed Date: 0608155 / 2006-10-20<br>Spill Number/Closed Date: 9111408 / 1992-02-12<br>Spill Number/Closed Date: 0510506 / 2006-12-27<br>Site ID: 372052<br>Site ID: 88194<br>Site ID: 356495<br>Spill Date: 2006-10-16<br>Spill Date: 1991-02-05<br>Spill Date: 2005-12-07 | | | | |
| FORECLOSER - UST | 56 CULVER ST | WSW 0 - 1/8 (0.082 mi.) | G33 | 162 |

Spill Number/Closed Date: 1907273 / 2019-11-20
Site ID: 595384
Spill Date: 2019-10-18

YONKERS PUBLIC SCHOO — 350 HAWTHORNE AVE — W 0 - 1/8 (0.101 mi.) — G53 — 187
Spill Number/Closed Date: 2204300 / 2022-09-09
Spill Number/Closed Date: 0802209 / Not Reported
Site ID: 640442
Site ID: 398303
Spill Date: 2022-08-02
Spill Date: 2008-05-27

PROFETA — 32 PURSER PLACE — NNW 0 - 1/8 (0.123 mi.) — M69 — 226
Spill Number/Closed Date: 9805619 / 2009-12-16
Site ID: 304436
Spill Date: 1998-08-05

***Other Ascertainable Records***

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 11/30/2025 has revealed that there are 61 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***DEVONSHIRE LANE SERV*** EPA ID:: NYD986888329 | ***390 RIVERDALE AVE*** | ***SSE 0 - 1/8 (0.033 mi.)*** | ***C15*** | ***128*** |
| ***CON EDISON*** EPA ID:: NYP004722369 | ***42 CLIFF AVE & RADFO*** | ***ESE 0 - 1/8 (0.097 mi.)*** | ***H45*** | ***175*** |
| CON EDISON EPA ID:: NYP004839894 | 42 CLIFF AVE & RADFO | ESE 0 - 1/8 (0.097 mi.) | H47 | 179 |
| CON EDISON TRANSFORM EPA ID:: NYP004221370 | POST ST & HAMILTON A | ENE 0 - 1/8 (0.107 mi.) | F56 | 192 |
| ***COSMETIC CAR CARE IN*** EPA ID:: NY0000195263 | ***320 RIVERDALE AVE*** | ***N 0 - 1/8 (0.108 mi.)*** | ***K60*** | ***199*** |
| ***CON EDISON*** EPA ID:: NYP004848182 | ***92 HAMILTON AVE*** | ***ENE 1/8 - 1/4 (0.130 mi.)*** | ***O73*** | ***230*** |
| ***CON EDISON TRANSFORM*** EPA ID:: NYP004321170 | ***92 HAMILTON AVE*** | ***ENE 1/8 - 1/4 (0.130 mi.)*** | ***O74*** | ***232*** |
| ***CON EDISON MANHOLE 1*** EPA ID:: NYP004215364 | ***69 HAMILTON AVE FRON*** | ***NE 1/8 - 1/4 (0.131 mi.)*** | ***J78*** | ***240*** |
| CON EDISON EPA ID:: NYP004813073 | 73 CLIFF AVE | SSE 1/8 - 1/4 (0.136 mi.) | N86 | 253 |
| ***CON EDISON SERVICE B*** EPA ID:: NYP004397519 | ***93 ELLIOT AVE & MORR*** | ***ENE 1/8 - 1/4 (0.147 mi.)*** | ***O97*** | ***265*** |
| ***CON EDISON*** | ***117 RADFORD ST*** | ***SE 1/8 - 1/4 (0.149 mi.)*** | ***N98*** | ***269*** |

| | | | | |
|---|---|---|---|---|
| EPA ID:: NYP004753257 | | | | |
| CON EDISON<br>EPA ID:: NYP004810020 | 112 RADFORD ST | SSE 1/8 - 1/4 (0.151 mi.) | N102 | 275 |
| ***CON EDISON MANHOLE 1***<br>EPA ID:: NYP004215984 | ***59 HAMILTON AVE*** | ***NE 1/8 - 1/4 (0.156 mi.)*** | ***R109*** | ***288*** |
| ***RIVERDALE CLEANERS***<br>EPA ID:: NYR000034926 | ***434 RIVERDALE AVE*** | ***SSW 1/8 - 1/4 (0.157 mi.)*** | ***L112*** | ***294*** |
| ***CON EDISON***<br>EPA ID:: NYP004753307 | ***107 RADFORD ST*** | ***SE 1/8 - 1/4 (0.167 mi.)*** | ***U121*** | ***328*** |
| ***YONKERS PUBLICS SCHO***<br>EPA ID:: NYR000062919 | ***75 MORRIS ST*** | ***N 1/8 - 1/4 (0.168 mi.)*** | ***V125*** | ***334*** |
| ***CON EDISON SERVICE B***<br>EPA ID:: NYP004508776 | ***88 ELLIOTT AVE*** | ***ENE 1/8 - 1/4 (0.174 mi.)*** | ***O129*** | ***343*** |
| CON EDISON<br>EPA ID:: NYP004824849 | 61 ELLIOT AVE | ENE 1/8 - 1/4 (0.181 mi.) | R137 | 354 |
| ***CON EDISON SERVICE B***<br>EPA ID:: NYP004418216 | ***415 S BROADWAY*** | ***ESE 1/8 - 1/4 (0.182 mi.)*** | ***S138*** | ***356*** |
| ***CON EDISON MANHOLE 1***<br>EPA ID:: NYP004220984 | ***HAMILTON AVE & MORRI*** | ***NE 1/8 - 1/4 (0.185 mi.)*** | ***R142*** | ***364*** |
| ***CON EDISON***<br>EPA ID:: NYP004816896 | ***MORRIS AVE & HAMILTO*** | ***NE 1/8 - 1/4 (0.185 mi.)*** | ***R144*** | ***370*** |
| ***CON EDISON MANHOLE 1***<br>EPA ID:: NYP004219315 | ***MORRIS ST & HAMITON*** | ***NE 1/8 - 1/4 (0.185 mi.)*** | ***R145*** | ***372*** |
| CON EDISON<br>EPA ID:: NYP004810137 | 100 RADFORD ST | SE 1/8 - 1/4 (0.185 mi.) | U147 | 378 |
| ***CON EDISON***<br>EPA ID:: NYP004211363 | ***POST ST & S BROADWAY*** | ***E 1/8 - 1/4 (0.201 mi.)*** | ***S163*** | ***396*** |
| ***CON EDISON SERVICE B***<br>EPA ID:: NYP004465860 | ***S BROADWAY & POST ST*** | ***E 1/8 - 1/4 (0.201 mi.)*** | ***S166*** | ***402*** |
| ***CON EDISON MANHOLE:***<br>EPA ID:: NYP004414900 | ***379 S BROADWAY & MCL*** | ***ENE 1/8 - 1/4 (0.202 mi.)*** | ***Y169*** | ***409*** |
| ***CON EDISON SERVICE B***<br>EPA ID:: NYP004414843 | ***386 S BROADWAY*** | ***E 1/8 - 1/4 (0.207 mi.)*** | ***S172*** | ***417*** |
| ***CON EDISON SERVICE B***<br>EPA ID:: NYP004493714 | ***15 ST ANDREWS PL FRO*** | ***SE 1/8 - 1/4 (0.207 mi.)*** | ***AC176*** | ***424*** |
| CON EDISON<br>EPA ID:: NYP004795514 | 15 SAINT ANDREWS PL | SE 1/8 - 1/4 (0.207 mi.) | AC178 | 428 |
| ***CON EDISON MANHOLE 6***<br>EPA ID:: NYP004217380 | ***VALENTINE LN & GRAY*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***AE184*** | ***437*** |
| ***CON EDISON TRANSFORM***<br>EPA ID:: NYP004420170 | ***GRAY PL & VALENTINE*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***AE185*** | ***442*** |
| ***CON EDISON TRANSFORM***<br>EPA ID:: NYP004216646 | ***GRAY PL & VALENTINE*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***AE186*** | ***445*** |
| ***CON EDISON SERVICE B***<br>EPA ID:: NYP004420501 | ***25 MORRIS ST*** | ***NE 1/8 - 1/4 (0.213 mi.)*** | ***AA187*** | ***450*** |
| ***RITE AID #02541*** | ***420 S BROADWAY*** | ***E 1/8 - 1/4 (0.213 mi.)*** | ***AD188*** | ***453*** |

| | | | | |
|---|---|---|---|---|
| EPA ID:: NYD986888733 | | | | |
| CON EDISON<br>EPA ID:: NYP004845406 | 26 SAINT ANDREWS PL | SSE 1/8 - 1/4 (0.214 mi.) | AC192 | 480 |
| ***CON EDISON SERVICE B***<br>EPA ID:: NYP004411211 | ***S BROADWAY & MCLEAN*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y194*** | ***483*** |
| ***CON EDISON***<br>EPA ID:: NYP004773602 | ***MCCLEAN AVE & BROADW*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y195*** | ***487*** |
| ***CON EDISON VAULT: 63***<br>EPA ID:: NYP004377321 | ***MCLEAN AVE & S BROAD*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y198*** | ***492*** |
| ***CON EDISON***<br>EPA ID:: NYP004182390 | ***S BROADWAY & MCLEAN*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y199*** | ***495*** |
| ***CON EDISON SERVICE B***<br>EPA ID:: NYP004412292 | ***MCCLEAN AVE & S BROA*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y200*** | ***499*** |
| ***CON EDISON SERVICE B***<br>EPA ID:: NYP004512877 | ***S BROADWAY & MCCLEAN*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y203*** | ***505*** |
| ***CON EDISON***<br>EPA ID:: NYP004208621 | ***S BROADWAY & MCLEAN*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y204*** | ***507*** |
| CON EDISON SERVICE B<br>EPA ID:: NYP004486841 | BROADWAY & MCLEAN AV | ENE 1/8 - 1/4 (0.214 mi.) | Y205 | 513 |
| CON EDISON SERVICE B<br>EPA ID:: NYP004488375 | S BROADWAY & MCLEAN | ENE 1/8 - 1/4 (0.214 mi.) | Y209 | 520 |
| ***CON EDISON SERVICE B***<br>EPA ID:: NYP004324075 | ***185 VALENTINE LN & G*** | ***S 1/8 - 1/4 (0.216 mi.)*** | ***AE211*** | ***523*** |
| CON EDISON VAULT: 75<br>EPA ID:: NYP004378204 | 123 VALENTINE LN & H | SW 1/8 - 1/4 (0.220 mi.) | AF216 | 561 |
| ***CON EDISON MANHOLE:***<br>EPA ID:: NYP004397444 | ***S BROADWAY & RADFORD*** | ***SE 1/8 - 1/4 (0.223 mi.)*** | ***AG219*** | ***574*** |
| ***CON EDISON TRANSFORM***<br>EPA ID:: NYP004232542 | ***RADFORD AVE & S BROA*** | ***SE 1/8 - 1/4 (0.223 mi.)*** | ***AG221*** | ***579*** |
| ***CON EDISON MANHOLE:***<br>EPA ID:: NYP004323259 | ***RADFORD ST & BROADWA*** | ***SE 1/8 - 1/4 (0.223 mi.)*** | ***AG223*** | ***585*** |
| CON EDISON MANHOLE:<br>EPA ID:: NYP004510228 | S BROADWAY & RADFORD | SE 1/8 - 1/4 (0.223 mi.) | AG224 | 588 |
| ***CONSOLIDATED EDISON***<br>EPA ID:: NYP004324083 | ***200 VALENTINE LN*** | ***S 1/8 - 1/4 (0.227 mi.)*** | ***AE227*** | ***593*** |
| ***CON EDISON***<br>EPA ID:: NYP004745204 | ***471 S BROADWAY*** | ***SE 1/8 - 1/4 (0.229 mi.)*** | ***AG229*** | ***599*** |
| ***CONSOLIDATED EDISON***<br>EPA ID:: NYP004735056 | ***347 S BROADWAY*** | ***ENE 1/8 - 1/4 (0.236 mi.)*** | ***AH233*** | ***606*** |
| CON EDISON<br>EPA ID:: NYP004842122 | 12 SAINT ANDREWS PL | SE 1/8 - 1/4 (0.236 mi.) | AC236 | 612 |
| ***NEW FRENCH DRY CLEAN***<br>EPA ID:: NYD084016377 | ***462 RIVERDALE AVE*** | ***SSW 1/8 - 1/4 (0.237 mi.)*** | ***AI239*** | ***617*** |
| ***CON EDISON SERVICE B***<br>EPA ID:: NYP004412789 | ***366 S BROADWAY FRONT*** | ***ENE 1/8 - 1/4 (0.239 mi.)*** | ***AJ243*** | ***652*** |
| ***CON EDISON TRANSFORM*** | ***ABEEL ST & VALENTINE*** | ***SSW 1/8 - 1/4 (0.243 mi.)*** | ***AL249*** | ***695*** |

EPA ID:: NYP004213732

| | | | | |
|---|---|---|---|---|
| ***CON EDISON MANHOLE*** | ***MCLEAN AVE & ROMAINE*** | ***E 1/8 - 1/4 (0.250 mi.)*** | ***AD255*** | ***705*** |
| EPA ID:: NYP004209324 | | | | |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***CON EDISON - EXCAVAT*** | ***RIVERDALE AVE AND CU*** | ***WSW 0 - 1/8 (0.012 mi.)*** | ***A4*** | ***53*** |
| EPA ID:: NYP004182457 | | | | |
| ***CON EDISON - TRENCH*** | ***RIVERDALE AVE AND CU*** | ***WSW 0 - 1/8 (0.012 mi.)*** | ***A5*** | ***85*** |
| EPA ID:: NYP004170684 | | | | |
| ***YONKERS PUBLIC SCHOO*** | ***348 HAWTHORNE RD*** | ***W 0 - 1/8 (0.078 mi.)*** | ***G30*** | ***149*** |
| EPA ID:: NYR000051292 | | | | |

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 01/30/2026 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***HUDSON RIVER PCBS*** | ***NO STREET APPLICABLE*** | ***WNW 1/4 - 1/2 (0.388 mi.)*** | ***0*** | ***26*** |
| EPA ID:: NYD980763841 | | | | |

CONSENT: Major Legal settlements that establish responsibility and standards for cleanup at NPL (superfund) sites. Released periodically by U.S. District Courts after settlement by parties to litigation matters.

A review of the CONSENT list, as provided by EDR, and dated 09/30/2025 has revealed that there is 1 CONSENT site within approximately 1 mile of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***HUDSON RIVER PCBS*** | ***NO STREET APPLICABLE*** | ***WNW 1/4 - 1/2 (0.388 mi.)*** | ***0*** | ***26*** |

PFAS ECHO: Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

A review of the PFAS ECHO list, as provided by EDR, and dated 12/17/2025 has revealed that there is 1 PFAS ECHO site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ACCURATE PLASTICS IN | 18 MORRIS PLACE | NE 0 - 1/8 (0.099 mi.) | J49 | 182 |

# EXECUTIVE SUMMARY

UST FINDER RELEASE: US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

A review of the UST FINDER RELEASE list, as provided by EDR, and dated 06/08/2023 has revealed that there are 11 UST FINDER RELEASE sites within approximately 0.5 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| GAS STATION | 416-418 RIVERDALE AV | SSW 0 - 1/8 (0.116 mi.) | L64 | 222 |
| THIRD POLICE PRECINC | 435 RIVERDALE AVE | SSW 1/8 - 1/4 (0.161 mi.) | T120 | 327 |
| BROADWAY GAS POST | 310 SOUTH BROADWAY | NE 1/4 - 1/2 (0.316 mi.) | AT275 | 739 |
| T & G SERVICE STATIO | 310 SOUTH BROADWAY | NE 1/4 - 1/2 (0.316 mi.) | AT276 | 740 |
| DEVA LEASING CORP. | 13 LUDLOW STREET | NE 1/4 - 1/2 (0.330 mi.) | AU282 | 805 |
| BUSINESS | 7-17 LUDLOW STREET | NE 1/4 - 1/2 (0.337 mi.) | AU287 | 813 |
| 558 SOUTH BROADWAY | 558 SOUTH BROADWAY S | SSE 1/4 - 1/2 (0.408 mi.) | 306 | 863 |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| CITGO STATION | 380 RIVERDALE AVE | SSW 0 - 1/8 (0.018 mi.) | A10 | 116 |
| 252 HAWTHORNE AVENUE | 252 HAWTHORNE AVENUE | NNW 1/4 - 1/2 (0.264 mi.) | AN257 | 710 |
| CITY GARAGE | 152 DOWNING STREET | NNW 1/4 - 1/2 (0.412 mi.) | AY310 | 873 |
| DOWNING ST GARAGE | 152 DOWNING STREET | NNW 1/4 - 1/2 (0.412 mi.) | AY311 | 874 |

E MANIFEST: EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

A review of the E MANIFEST list, as provided by EDR, and dated 11/30/2025 has revealed that there are 18 E MANIFEST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| CON EDISON - ELECTRI | 63 HAMILTON AVE | NE 1/8 - 1/4 (0.142 mi.) | J89 | 257 |
| CON EDISON - COMPANY | 75 CLIFF AVE | SSE 1/8 - 1/4 (0.143 mi.) | N91 | 259 |
| CONSOLIDATED EDISON | POST ST & ELLIOT ST | E 1/8 - 1/4 (0.153 mi.) | O105 | 280 |
| CONSOLIDATED EDISON | OPP OF 104 ELLIOTT A | E 1/8 - 1/4 (0.160 mi.) | S115 | 319 |
| CONSOLIDATED EDISON | 104 ELLIOT AVE | E 1/8 - 1/4 (0.160 mi.) | S117 | 322 |
| CONSOLIDATED EDISON | 146 ELLIOT AVE | ESE 1/8 - 1/4 (0.170 mi.) | P128 | 341 |
| CON EDISON/ATTN: ELE | SOUTH BROADWAY AND 6 | E 1/8 - 1/4 (0.178 mi.) | S134 | 350 |
| CONSOLIDATED EDISON | 435 S BROADWAY | ESE 1/8 - 1/4 (0.183 mi.) | 140 | 361 |
| CONSOLIDATED EDISON | 62 ELLIOTT AVE | ENE 1/8 - 1/4 (0.200 mi.) | W159 | 391 |
| CON EDISON | 39 HAMITTON AVE | NE 1/8 - 1/4 (0.202 mi.) | AA168 | 407 |
| CONSOLIDATED EDISON | 410 S BROADWAY | E 1/8 - 1/4 (0.211 mi.) | AD179 | 430 |
| CONSOLIDATED EDISON | GRAY PL & VALENTINES | S 1/8 - 1/4 (0.212 mi.) | AE183 | 436 |
| ***RITE AID #02541*** | ***420 S BROADWAY*** | ***E 1/8 - 1/4 (0.213 mi.)*** | ***AD188*** | ***453*** |
| CONSOLIDATED EDISON | 390 S BROADWAY | E 1/8 - 1/4 (0.214 mi.) | Y189 | 476 |
| ***359 S BROADWAY CLEAN*** | ***359 S BROADWAY*** | ***ENE 1/8 - 1/4 (0.217 mi.)*** | ***W212*** | ***526*** |
| ***CONSOLIDATED EDISON*** | ***200 VALENTINE LN*** | ***S 1/8 - 1/4 (0.227 mi.)*** | ***AE227*** | ***593*** |
| CONSOLIDATED EDISON | 462 SOUTH BROADWAY | SE 1/8 - 1/4 (0.232 mi.) | AG232 | 604 |
| ***CONSOLIDATED EDISON*** | ***347 S BROADWAY*** | ***ENE 1/8 - 1/4 (0.236 mi.)*** | ***AH233*** | ***606*** |

NY DRYCLEANERS: A listing of all registered drycleaning facilities.

A review of the NY DRYCLEANERS list, as provided by EDR, and dated 11/25/2025 has revealed that there are 4 NY DRYCLEANERS sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***RIVERDALE CLEANERS*** Facility Id: 3-5518-00773 | ***434 RIVERDALE AVE*** | ***SSW 1/8 - 1/4 (0.157 mi.)*** | ***L112*** | ***294*** |
| FOUR SEASONS DRYCLEA Facility Id: 3-5518-00714 | 359 S BROADWAY | ENE 1/8 - 1/4 (0.217 mi.) | W213 | 547 |
| NEW FRENCH DRY CLEAN Facility Id: 3-5518-00780 | 462 RIVERDALE AVE | SSW 1/8 - 1/4 (0.237 mi.) | AI241 | 633 |
| BROADWAY CLEANERS Facility Id: 3-5518-00767 | 479 SOUTH BROADWAY | SE 1/8 - 1/4 (0.243 mi.) | AK247 | 659 |

NY MANIFEST: Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

A review of the NY MANIFEST list, as provided by EDR, and dated 12/31/2019 has revealed that there are 72 NY MANIFEST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| CON ED EPA ID: NYP004839894 | 42 CLIFF AVE & RADFO | ESE 0 - 1/8 (0.097 mi.) | H44 | 173 |
| CON EDISON EPA ID: NYP004668042 | W S HAMILTON AVE & P | ENE 0 - 1/8 (0.107 mi.) | F57 | 194 |
| ***COSMETIC CAR CARE IN*** EPA ID: NY0000195263 | ***320 RIVERDALE AVE*** | ***N 0 - 1/8 (0.108 mi.)*** | ***K60*** | ***199*** |
| CON EDISON EPA ID: NYP004651972 | RADFORD ST & CLIFF A | SSE 1/8 - 1/4 (0.129 mi.) | N71 | 228 |
| ***CON EDISON TRANSFORM*** EPA ID: NYP004321170 EPA ID: NYP004848182 | ***92 HAMILTON AVE*** | ***ENE 1/8 - 1/4 (0.130 mi.)*** | ***O74*** | ***232*** |
| CON EDISON EPA ID: NYP004813073 | 73 CLIFF AVE | SSE 1/8 - 1/4 (0.136 mi.) | N87 | 255 |
| ***CON EDISON SERVICE B*** EPA ID: NYP004397519 | ***93 ELLIOT AVE & MORR*** | ***ENE 1/8 - 1/4 (0.147 mi.)*** | ***O97*** | ***265*** |
| CON EDISON EPA ID: NYP004753257 | 117 RADFORD ST | SE 1/8 - 1/4 (0.149 mi.) | N100 | 272 |
| CON EDISON EPA ID: NYP004810020 | 112 RADFORD ST | SSE 1/8 - 1/4 (0.151 mi.) | N101 | 274 |
| CON EDISON EPA ID: NYP004722336 | F/O 115 RADFORD ST | SE 1/8 - 1/4 (0.156 mi.) | N108 | 287 |
| CON EDISON EPA ID: NYP004722369 | 110 RADFORD ST & CLI | SE 1/8 - 1/4 (0.156 mi.) | N110 | 292 |
| ***RIVERDALE CLEANERS*** EPA ID: NYR000034926 | ***434 RIVERDALE AVE*** | ***SSW 1/8 - 1/4 (0.157 mi.)*** | ***L112*** | ***294*** |
| CON EDISON | 107 RADFORD ST | SE 1/8 - 1/4 (0.167 mi.) | U122 | 330 |

| | | | | |
|---|---|---|---|---|
| EPA ID: NYP004753307 | | | | |
| ***YONKERS PUBLICS SCHO*** EPA ID: NYR000062919 | ***75 MORRIS ST*** | ***N 1/8 - 1/4 (0.168 mi.)*** | ***V125*** | ***334*** |
| CON EDISON EPA ID: NYP004508776 | 88 ELLIOTT AVE | ENE 1/8 - 1/4 (0.174 mi.) | O130 | 345 |
| CON EDISON EPA ID: NYP004720363 | 160 ELLIOTT ST | SE 1/8 - 1/4 (0.178 mi.) | U133 | 349 |
| CON ED EPA ID: NYP004824849 | 61 ELLIOT AVE | ENE 1/8 - 1/4 (0.181 mi.) | R135 | 352 |
| ***CON EDISON SERVICE B*** EPA ID: NYP004418216 | ***415 S BROADWAY*** | ***ESE 1/8 - 1/4 (0.182 mi.)*** | ***S138*** | ***356*** |
| CONSOLIDATED EDISON EPA ID: NYP004230785 | HAMILTON & MORRIS ST | NE 1/8 - 1/4 (0.185 mi.) | R141 | 363 |
| ***CON EDISON MANHOLE 1*** EPA ID: NYP004220984 | ***HAMILTON AVE & MORRI*** | ***NE 1/8 - 1/4 (0.185 mi.)*** | ***R142*** | ***364*** |
| ***CON EDISON MANHOLE 1*** EPA ID: NYP004219315 | ***MORRIS ST & HAMITON*** | ***NE 1/8 - 1/4 (0.185 mi.)*** | ***R145*** | ***372*** |
| CON EDISON EPA ID: NYP004721601 | OPP 393 S BROADWAY | E 1/8 - 1/4 (0.194 mi.) | S155 | 387 |
| CON EDISON EPA ID: NYP004711701 | F/O 385 S BROADWAY | E 1/8 - 1/4 (0.200 mi.) | Y160 | 393 |
| ***CON EDISON*** EPA ID: NYP004211363 | ***POST ST & S BROADWAY*** | ***E 1/8 - 1/4 (0.201 mi.)*** | ***S163*** | ***396*** |
| CON EDISON EPA ID: NYP004667541 | S BROADWAY & POST ST | E 1/8 - 1/4 (0.201 mi.) | S164 | 400 |
| CON EDISON EPA ID: NYP004667655 | POST RD & S. BROADWA | E 1/8 - 1/4 (0.201 mi.) | S165 | 401 |
| ***CON EDISON SERVICE B*** EPA ID: NYP004465860 | ***S BROADWAY & POST ST*** | ***E 1/8 - 1/4 (0.201 mi.)*** | ***S166*** | ***402*** |
| CON EDISON EPA ID: NYP004667515 | S BROADWAY & POST AV | E 1/8 - 1/4 (0.201 mi.) | S167 | 406 |
| ***CON EDISON MANHOLE:*** EPA ID: NYP004414900 | ***379 S BROADWAY & MCL*** | ***ENE 1/8 - 1/4 (0.202 mi.)*** | ***Y169*** | ***409*** |
| ***CON EDISON SERVICE B*** EPA ID: NYP004414843 | ***386 S BROADWAY*** | ***E 1/8 - 1/4 (0.207 mi.)*** | ***S172*** | ***417*** |
| CON EDISON EPA ID: NYP004795514 | 15 SAINT ANDREWS PL | SE 1/8 - 1/4 (0.207 mi.) | AC174 | 421 |
| AMCO/RAVAGO MFG AMER EPA ID: NYP004493714 | 15 ST ANDREWS PL FRO | SE 1/8 - 1/4 (0.207 mi.) | AC177 | 426 |
| ***CON EDISON MANHOLE 6*** EPA ID: NYP004217380 | ***VALENTINE LN & GRAY*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***AE184*** | ***437*** |
| ***CON EDISON TRANSFORM*** EPA ID: NYP004420170 | ***GRAY PL & VALENTINE*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***AE185*** | ***442*** |
| ***CON EDISON TRANSFORM*** EPA ID: NYP004216646 | ***GRAY PL & VALENTINE*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***AE186*** | ***445*** |
| ***CON EDISON SERVICE B*** | ***25 MORRIS ST*** | ***NE 1/8 - 1/4 (0.213 mi.)*** | ***AA187*** | ***450*** |

| | | | | |
|---|---|---|---|---|
| EPA ID: NYP004420501 | | | | |
| CON EDISON<br>EPA ID: NYP004845406 | 26 SAINT ANDREWS PL | SSE 1/8 - 1/4 (0.214 mi.) | AC190 | 478 |
| ***CON EDISON SERVICE B***<br>EPA ID: NYP004411211 | ***S BROADWAY & MCLEAN*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y194*** | ***483*** |
| CON EDISON<br>EPA ID: NYP004488375 | S BROADWAY & MCLEAN | ENE 1/8 - 1/4 (0.214 mi.) | Y196 | 489 |
| CON EDISON<br>EPA ID: NYP004512877 | S BROADWAY & MCCLEAN | ENE 1/8 - 1/4 (0.214 mi.) | Y197 | 491 |
| ***CON EDISON VAULT: 63***<br>EPA ID: NYP004377321 | ***MCLEAN AVE & S BROAD*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y198*** | ***492*** |
| ***CON EDISON***<br>EPA ID: NYP004182390 | ***S BROADWAY & MCLEAN*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y199*** | ***495*** |
| ***CON EDISON SERVICE B***<br>EPA ID: NYP004412292 | ***MCCLEAN AVE & S BROA*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y200*** | ***499*** |
| CON EDISON<br>EPA ID: NYP004773602 | MCCLEAN AVE & BROADW | ENE 1/8 - 1/4 (0.214 mi.) | Y201 | 502 |
| CON EDISON<br>EPA ID: NYP004666558 | MCLEANE AVE & S BROA | ENE 1/8 - 1/4 (0.214 mi.) | Y202 | 503 |
| ***CON EDISON***<br>EPA ID: NYP004208621 | ***S BROADWAY & MCLEAN*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y204*** | ***507*** |
| CONSOLIDATED EDISON<br>EPA ID: NYP004062303 | S BROADWAY & MCLEAN | ENE 1/8 - 1/4 (0.214 mi.) | Y206 | 516 |
| CON EDISON<br>EPA ID: NYP004486841 | BROADWAY & MCLEAN AV | ENE 1/8 - 1/4 (0.214 mi.) | Y207 | 517 |
| ***CON EDISON SERVICE B***<br>EPA ID: NYP004324075 | ***185 VALENTINE LN & G*** | ***S 1/8 - 1/4 (0.216 mi.)*** | ***AE211*** | ***523*** |
| ***359 S BROADWAY CLEAN***<br>EPA ID: NYD982531568 | ***359 S BROADWAY*** | ***ENE 1/8 - 1/4 (0.217 mi.)*** | ***W212*** | ***526*** |
| CON EDISON<br>EPA ID: NYP004662664 | F/O 359 W BROADWAY | ENE 1/8 - 1/4 (0.217 mi.) | W214 | 559 |
| CON EDISON<br>EPA ID: NYP004378204 | 123 VALENTINE LN & H | SW 1/8 - 1/4 (0.220 mi.) | AF215 | 560 |
| RITE AID #2541<br>EPA ID: NYD986888733 | 420 S BROADWAY | E 1/8 - 1/4 (0.222 mi.) | AD218 | 565 |
| ***CON EDISON MANHOLE:***<br>EPA ID: NYP004397444 | ***S BROADWAY & RADFORD*** | ***SE 1/8 - 1/4 (0.223 mi.)*** | ***AG219*** | ***574*** |
| ***CON EDISON TRANSFORM***<br>EPA ID: NYP004232542 | ***RADFORD AVE & S BROA*** | ***SE 1/8 - 1/4 (0.223 mi.)*** | ***AG221*** | ***579*** |
| CON EDISON<br>EPA ID: NYP004510228 | S BROADWAY & RADFORD | SE 1/8 - 1/4 (0.223 mi.) | AG222 | 584 |
| ***CON EDISON MANHOLE:***<br>EPA ID: NYP004323259 | ***RADFORD ST & BROADWA*** | ***SE 1/8 - 1/4 (0.223 mi.)*** | ***AG223*** | ***585*** |
| CONSOLIDATED EDISON<br>EPA ID: NYP004233542 | RADFORD ST & SOUTH B | SE 1/8 - 1/4 (0.223 mi.) | AG225 | 591 |
| ***CONSOLIDATED EDISON*** | ***200 VALENTINE LN*** | ***S 1/8 - 1/4 (0.227 mi.)*** | ***AE227*** | ***593*** |

| | | | | |
|---|---|---|---|---|
| EPA ID: NYP004324083 | | | | |
| CON EDISON<br>EPA ID: NYP004745204 | 471 S BROADWAY | SE 1/8 - 1/4 (0.229 mi.) | AG230 | 601 |
| CON EDISON<br>EPA ID: NYP004735056 | 347 S BROADWAY | ENE 1/8 - 1/4 (0.236 mi.) | AH234 | 610 |
| CON ED<br>EPA ID: NYP004842122 | 12 SAINT ANDREWS PL | SE 1/8 - 1/4 (0.236 mi.) | AC237 | 614 |
| ***NEW FRENCH DRY CLEAN***<br>EPA ID: NYD084016377 | ***462 RIVERDALE AVE*** | ***SSW 1/8 - 1/4 (0.237 mi.)*** | ***AI239*** | ***617*** |
| ***CON EDISON SERVICE B***<br>EPA ID: NYP004412789 | ***366 S BROADWAY FRONT*** | ***ENE 1/8 - 1/4 (0.239 mi.)*** | ***AJ243*** | ***652*** |
| CON EDISON<br>EPA ID: NYP004417432 | F/O 366 S BROADWAY & | ENE 1/8 - 1/4 (0.239 mi.) | AJ244 | 656 |
| ***BROADWAY CLEANERS***<br>EPA ID: NYD986943413 | ***479 S BROADWAY*** | ***SE 1/8 - 1/4 (0.243 mi.)*** | ***AK248*** | ***679*** |
| ***CON EDISON TRANSFORM***<br>EPA ID: NYP004213732 | ***ABEEL ST & VALENTINE*** | ***SSW 1/8 - 1/4 (0.243 mi.)*** | ***AL249*** | ***695*** |
| CON EDISON<br>EPA ID: NYP004499182 | VALENTINE LA & ABEEL | SSW 1/8 - 1/4 (0.243 mi.) | AL250 | 699 |
| ***CON EDISON MANHOLE***<br>EPA ID: NYP004209324 | ***MCLEAN AVE & ROMAINE*** | ***E 1/8 - 1/4 (0.250 mi.)*** | ***AD255*** | ***705*** |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***CON EDISON - EXCAVAT***<br>EPA ID: NYP004170684<br>EPA ID: NYP004182457 | ***RIVERDALE AVE AND CU*** | ***WSW 0 - 1/8 (0.012 mi.)*** | ***A4*** | ***53*** |
| ***YONKERS PUBLIC SCHOO***<br>EPA ID: NYR000051292 | ***348 HAWTHORNE RD*** | ***W 0 - 1/8 (0.078 mi.)*** | ***G30*** | ***149*** |
| CONSOLIDATED EDISON<br>EPA ID: NYP004052585 | 45 FAIRFIELD RD & BE | WNW 1/8 - 1/4 (0.203 mi.) | AB171 | 413 |

NJ MANIFEST: Hazardous waste manifest information.

A review of the NJ MANIFEST list, as provided by EDR, and dated 12/31/2018 has revealed that there are 31 NJ MANIFEST sites within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| CON EDISON<br>EPA Id: NYP004839894 | 42 CLIFF AVE & RADFO | ESE 0 - 1/8 (0.097 mi.) | H46 | 177 |
| ***COSMETIC CAR CARE IN***<br>EPA Id: NY0000195263 | ***320 RIVERDALE AVE*** | ***N 0 - 1/8 (0.108 mi.)*** | ***K60*** | ***199*** |
| CON EDISON<br>EPA Id: NYP004848182 | 92 HAMILTON AVE | ENE 1/8 - 1/4 (0.130 mi.) | O75 | 237 |
| ***CON EDISON MANHOLE 1***<br>EPA Id: NYP004215364 | ***69 HAMILTON AVE FRON*** | ***NE 1/8 - 1/4 (0.131 mi.)*** | ***J78*** | ***240*** |
| CON EDISON | 73 CLIFF AVE | SSE 1/8 - 1/4 (0.136 mi.) | N85 | 251 |

| | | | | |
|---|---|---|---|---|
| EPA Id: NYP004813073 | | | | |
| CON EDISON<br>EPA Id: NYP004753257 | 117 RADFORD ST | SE 1/8 - 1/4 (0.149 mi.) | N99 | 271 |
| CON EDISON<br>EPA Id: NYP004810020 | 112 RADFORD ST | SSE 1/8 - 1/4 (0.151 mi.) | N103 | 277 |
| ***CON EDISON MANHOLE 1***<br>EPA Id: NYP004215984 | ***59 HAMILTON AVE*** | ***NE 1/8 - 1/4 (0.156 mi.)*** | ***R109*** | ***288*** |
| CON EDISON<br>EPA Id: NYP004722369 | 110 RADFORD ST & CLI | SE 1/8 - 1/4 (0.156 mi.) | N111 | 293 |
| CON EDISON<br>EPA Id: NYP004753307 | 107 RADFORD ST | SE 1/8 - 1/4 (0.167 mi.) | U123 | 332 |
| CON EDISON<br>EPA Id: NYP004824849 | 61 ELLIOT AVE | ENE 1/8 - 1/4 (0.181 mi.) | R136 | 353 |
| ***CON EDISON MANHOLE 1***<br>EPA Id: NYP004220984 | ***HAMILTON AVE & MORRI*** | ***NE 1/8 - 1/4 (0.185 mi.)*** | ***R142*** | ***364*** |
| CON EDISON<br>EPA Id: NYP004816896 | MORRIS AVE & HAMILTO | NE 1/8 - 1/4 (0.185 mi.) | R143 | 369 |
| ***CON EDISON MANHOLE 1***<br>EPA Id: NYP004219315 | ***MORRIS ST & HAMITON*** | ***NE 1/8 - 1/4 (0.185 mi.)*** | ***R145*** | ***372*** |
| CON EDISON<br>EPA Id: NYP004810137 | 100 RADFORD ST | SE 1/8 - 1/4 (0.185 mi.) | U146 | 377 |
| ***CON EDISON***<br>EPA Id: NYP004211363 | ***POST ST & S BROADWAY*** | ***E 1/8 - 1/4 (0.201 mi.)*** | ***S163*** | ***396*** |
| CON EDISON<br>EPA Id: NYP004795514 | 15 SAINT ANDREWS PL | SE 1/8 - 1/4 (0.207 mi.) | AC175 | 423 |
| ***CON EDISON MANHOLE 6***<br>EPA Id: NYP004217380 | ***VALENTINE LN & GRAY*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***AE184*** | ***437*** |
| ***CON EDISON TRANSFORM***<br>EPA Id: NYP004216646 | ***GRAY PL & VALENTINE*** | ***S 1/8 - 1/4 (0.212 mi.)*** | ***AE186*** | ***445*** |
| CON EDISON<br>EPA Id: NYP004845406 | 26 SAINT ANDREWS PL | SSE 1/8 - 1/4 (0.214 mi.) | AC191 | 479 |
| CON EDISON<br>EPA Id: NYP004773602 | MCCLEAN AVE & BROADW | ENE 1/8 - 1/4 (0.214 mi.) | Y193 | 482 |
| ***CON EDISON***<br>EPA Id: NYP004208621 | ***S BROADWAY & MCLEAN*** | ***ENE 1/8 - 1/4 (0.214 mi.)*** | ***Y204*** | ***507*** |
| CON EDISON SERVICE B<br>EPA Id: NYP004412292 | MCCLEAN AVE & S BROA | ENE 1/8 - 1/4 (0.214 mi.) | Y208 | 518 |
| CON EDISON MANHOLE:<br>EPA Id: NYP004323259 | RADFORD ST & BROADWA | SE 1/8 - 1/4 (0.223 mi.) | AG220 | 578 |
| ***CON EDISON TRANSFORM***<br>EPA Id: NYP004232542 | ***RADFORD AVE & S BROA*** | ***SE 1/8 - 1/4 (0.223 mi.)*** | ***AG221*** | ***579*** |
| CON EDISON<br>EPA Id: NYP004745204 | 471 S BROADWAY | SE 1/8 - 1/4 (0.229 mi.) | AG228 | 598 |
| CON EDISON<br>EPA Id: NYP004735056 | 347 S BROADWAY | ENE 1/8 - 1/4 (0.236 mi.) | AH235 | 611 |
| CON EDISON | 12 SAINT ANDREWS PL | SE 1/8 - 1/4 (0.236 mi.) | AC238 | 616 |

EPA Id: NYP004842122

| | | | | |
|---|---|---|---|---|
| ***CON EDISON TRANSFORM*** | ***ABEEL ST & VALENTINE*** | ***SSW 1/8 - 1/4 (0.243 mi.)*** | ***AL249*** | ***695*** |

EPA Id: NYP004213732

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***CON EDISON - EXCAVAT*** | ***RIVERDALE AVE AND CU*** | ***WSW 0 - 1/8 (0.012 mi.)*** | ***A4*** | ***53*** |

EPA Id: NYP004182457

| | | | | |
|---|---|---|---|---|
| ***CON EDISON - TRENCH*** | ***RIVERDALE AVE AND CU*** | ***WSW 0 - 1/8 (0.012 mi.)*** | ***A5*** | ***85*** |

EPA Id: NYP004170684

PA MANIFEST: Hazardous waste manifest information.

A review of the PA MANIFEST list, as provided by EDR, and dated 06/30/2018 has revealed that there is 1 PA MANIFEST site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| CON EDISON | CLIFF AVE & RADFORD | SSE 1/8 - 1/4 (0.129 mi.) | N72 | 229 |

Generator EPA Id: NYP004813073

RI MANIFEST: Hazardous waste manifest information

A review of the RI MANIFEST list, as provided by EDR, and dated 12/31/2020 has revealed that there is 1 RI MANIFEST site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***359 S BROADWAY CLEAN*** | ***359 S BROADWAY*** | ***ENE 1/8 - 1/4 (0.217 mi.)*** | ***W212*** | ***526*** |

EPA Id: NYD982531568
Manifest Document Number: 002486684SKS

NY MGP: From the late 1800's to the mid 1900's, hundreds of manufactured gas plants across New York State supplied homes and industry with fuel for heating, cooking, and lighting. Today, the New York State DEC is overseeing the investigation and cleanup of contamination left behind from these plants.

A review of the NY MGP list, as provided by EDR, and dated 11/25/2025 has revealed that there is 1 NY MGP site within approximately 1 mile of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***CE- LUDLOW ST-YONKER*** | ***162 DOWNING STREET*** | ***NNW 1/4 - 1/2 (0.411 mi.)*** | ***AY308*** | ***865*** |

NY NYC OER: Properties remediated under OER's oversight, both in the E-Designation program and the NYC Voluntary Cleanup Program. Includes sites completed and in progress.

A review of the NY NYC OER list, as provided by EDR, and dated 11/20/2025 has revealed that there is 1 NY NYC OER site within approximately 1 mile of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***\HEBREW HOME FOR THE*** | ***5901 PALISADE AV*** | ***SSW 1/2 - 1 (0.749 mi.)*** | ***337*** | ***1011*** |

# EXECUTIVE SUMMARY

DRYCLEANERS: A listing of list of ALL Dry cleaner facilities from the Integrated Compliance Information System (ICIS).

A review of the DRYCLEANERS list, as provided by EDR, and dated 12/13/2025 has revealed that there is 1 DRYCLEANERS site within approximately 0.25 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| ***NEW FRENCH DRY CLEAN*** | ***462 RIVERDALE AVE*** | ***SSW 1/8 - 1/4 (0.237 mi.)*** | ***AI240*** | ***632*** |

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR MGP: The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

A review of the EDR MGP list, as provided by EDR, has revealed that there is 1 EDR MGP site within approximately 1 mile of the target property.

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| CON EDISON - LUDLOW | KNOWLES STREET | NNW 1/4 - 1/2 (0.387 mi.) | AW299 | 844 |

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 5 EDR Hist Auto sites within approximately 0.125 miles of the target property.

| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| DEVONSHIRE LANE SERV | 390 RIVERDALE AVENUE | SSE 0 - 1/8 (0.033 mi.) | C13 | 120 |
| SPANOS GARAGE | 397 RIVERDALE AVENUE | SW 0 - 1/8 (0.047 mi.) | B20 | 137 |
| ANSELMO CARL INC | 418 RIVERDALE AVENUE | SSW 0 - 1/8 (0.117 mi.) | L65 | 223 |

| Lower Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| NIRAG MANAGEMENT INC | 380 RIVERDALE AVE | SSW 0 - 1/8 (0.018 mi.) | A7 | 99 |
| RIVERDALE AUTO SERVI | 377 RIVERDALE AVE | W 0 - 1/8 (0.019 mi.) | B12 | 120 |

# EXECUTIVE SUMMARY

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there is 1 EDR Hist Cleaner site within approximately 0.125 miles of the target property.

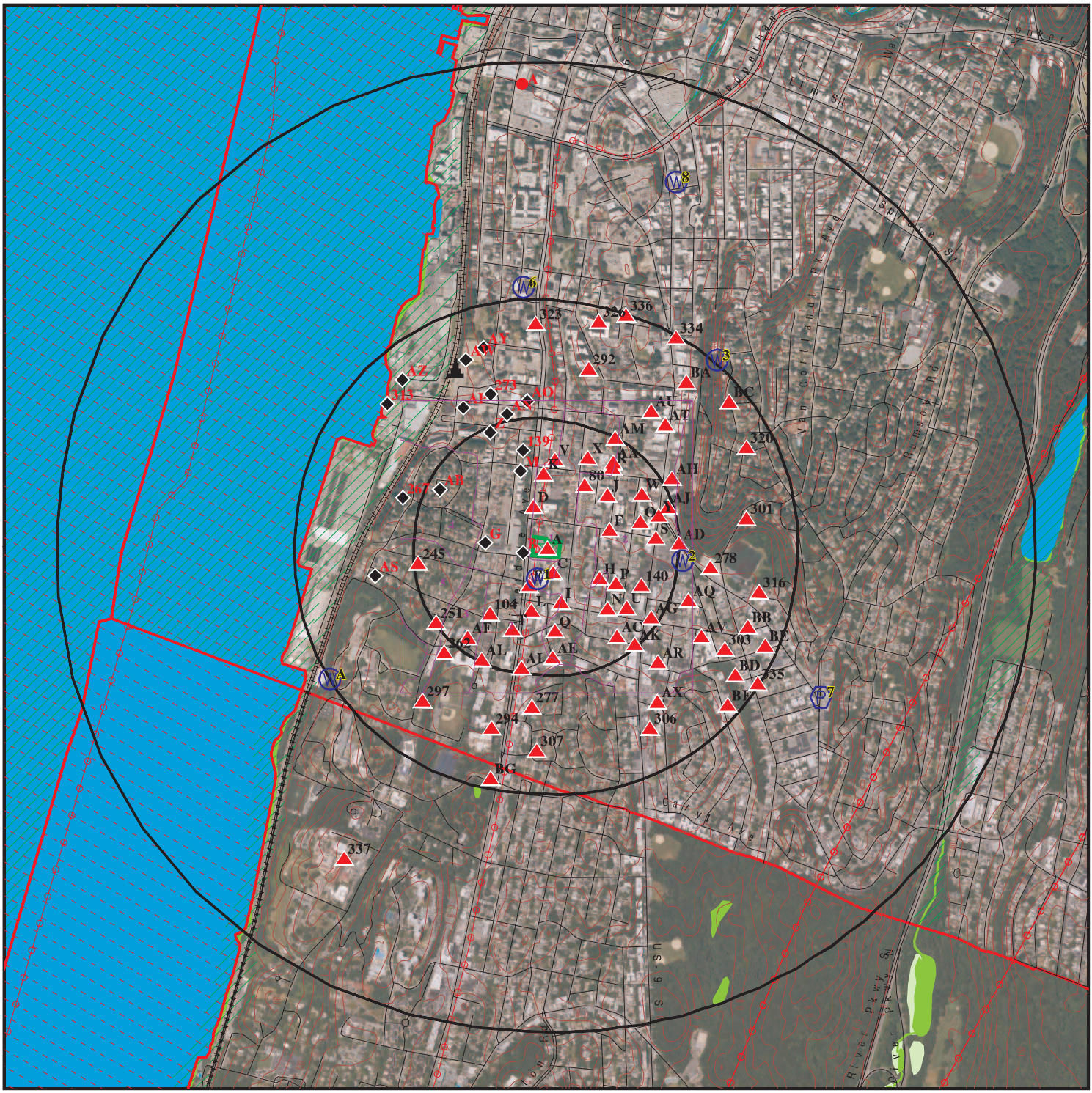
| Equal/Higher Elevation | Address | Direction / Distance | Map ID | Page |
|---|---|---|---|---|
| RED CAP DRIVE IN CLE | 417 RIVERDALE AVE | SSW 0 - 1/8 (0.096 mi.) | E43 | 173 |

# EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

| Site Name | Database(s) |
|---|---|
| MARITIME CADET TRAINING GROUNDS | NY SWF/LF |
| BARRETTO POINT PARK | NY SWF/LF |
| EAST RIVER | NY LTANKS |
| ROBINSON TTF | NY LTANKS |

# OVERVIEW MAP - 8299671.2S




This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | |
|---|---|
| SITE NAME: 13 Culver St and 372 Riverdale Ave<br>ADDRESS: 372 Riverdale Avenue<br>Yonkers NY 10705<br>LAT/LONG: 40.919652 / 73.900562 | CLIENT: Langan<br>CONTACT: Jennifer Armstrong<br>INQUIRY #: 8299671.2s<br>DATE: April 01, 2026 1:42 pm |

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# DETAIL MAP - 8299671.2S




This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

| | | | |
|---|---|---|---|
| SITE NAME: | 13 Culver St and 372 Riverdale Ave | CLIENT: | Langan |
| ADDRESS: | 372 Riverdale Avenue<br>Yonkers NY 10705 | CONTACT: | Jennifer Armstrong |
| LAT/LONG: | 40.919652 / 73.900562 | INQUIRY #: | 8299671.2s |
| | | DATE: | April 01, 2026 1:43 pm |

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# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| **STANDARD ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Lists of Federal NPL (Superfund) sites*** | | | | | | | | |
| NPL | 1.000 | | 0 | 0 | 1 | 0 | NR | 1 |
| Proposed NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| NPL LIENS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of Federal Delisted NPL sites*** | | | | | | | | |
| Delisted NPL | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of Federal sites subject to CERCLA removals and CERCLA orders*** | | | | | | | | |
| FEDERAL FACILITY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| SEMS | 0.500 | | 0 | 0 | 1 | NR | NR | 1 |
| ***Lists of Federal CERCLA sites with NFRAP*** | | | | | | | | |
| SEMS-ARCHIVE | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of Federal RCRA facilities undergoing Corrective Action*** | | | | | | | | |
| CORRACTS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of Federal RCRA TSD facilities*** | | | | | | | | |
| RCRA-TSDF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of Federal RCRA generators*** | | | | | | | | |
| RCRA-LQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-SQG | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| RCRA-VSQG | 0.250 | 1 | 0 | 2 | NR | NR | NR | 3 |
| ***Federal institutional controls / engineering controls registries*** | | | | | | | | |
| LUCIS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US ENG CONTROLS | 0.500 | | 0 | 0 | 1 | NR | NR | 1 |
| US INST CONTROLS | 0.500 | | 0 | 0 | 1 | NR | NR | 1 |
| ***Federal ERNS list*** | | | | | | | | |
| ERNS | TP | | NR | NR | NR | NR | NR | 0 |
| ***Lists of state- and tribal hazardous waste facilities*** | | | | | | | | |
| NY SHWS | 1.000 | | 0 | 1 | 1 | 0 | NR | 2 |
| NJ SHWS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| ***Lists of state and tribal landfills and solid waste disposal facilities*** | | | | | | | | |
| NY SWF/LF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NJ SWF/LF | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of state and tribal leaking storage tanks*** | | | | | | | | |
| INDIAN LUST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| NY LTANKS | 0.500 | | 10 | 23 | 63 | NR | NR | 96 |
| NY HIST LTANKS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of state and tribal registered storage tanks*** | | | | | | | | |
| FEMA UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NY UST | 0.250 | 1 | 8 | 16 | NR | NR | NR | 25 |
| NJ UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NY CBS UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NY MOSF UST | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY CBS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NY MOSF | 0.500 | | 0 | 0 | 2 | NR | NR | 2 |
| NY AST | 0.250 | | 10 | 19 | NR | NR | NR | 29 |
| NY CBS AST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NY MOSF AST | 0.500 | | 0 | 0 | 1 | NR | NR | 1 |
| INDIAN UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NY TANKS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ***State and tribal institutional control / engineering control registries*** | | | | | | | | |
| NY RES DECL | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| NY ENG CONTROLS | 0.500 | | 0 | 0 | 2 | NR | NR | 2 |
| NJ ENG CONTROLS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY INST CONTROL | 0.500 | | 0 | 0 | 2 | NR | NR | 2 |
| NJ INST CONTROL | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of state and tribal voluntary cleanup sites*** | | | | | | | | |
| NY VCP | 0.500 | | 0 | 0 | 1 | NR | NR | 1 |
| NJ VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| INDIAN VCP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Lists of state and tribal brownfield sites*** | | | | | | | | |
| NY BROWNFIELDS | 0.500 | | 0 | 0 | 5 | NR | NR | 5 |
| NJ BROWNFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY ERP | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| **ADDITIONAL ENVIRONMENTAL RECORDS** | | | | | | | | |
| ***Local Brownfield lists*** | | | | | | | | |
| US BROWNFIELDS | 0.500 | | 0 | 0 | 1 | NR | NR | 1 |
| ***Local Lists of Landfill / Solid Waste Disposal Sites*** | | | | | | | | |
| NY SWTIRE | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY SWRCY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NJ SWRCY | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| INDIAN ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| DEBRIS REGION 9 | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ODI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| IHS OPEN DUMPS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| ***Local Lists of Hazardous waste / Contaminated Sites*** | | | | | | | | |
| US HIST CDL | TP | | NR | NR | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| NY DEL SHWS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| US CDL | TP | | NR | NR | NR | NR | NR | 0 |
| ***Local Lists of Registered Storage Tanks*** | | | | | | | | |
| NY HIST UST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NY HIST AST | TP | | NR | NR | NR | NR | NR | 0 |
| ***Local Land Records*** | | | | | | | | |
| NY LIENS | TP | | NR | NR | NR | NR | NR | 0 |
| NJ LIENS | TP | | NR | NR | NR | NR | NR | 0 |
| LIENS 2 | TP | | NR | NR | NR | NR | NR | 0 |
| ***Records of Emergency Release Reports*** | | | | | | | | |
| HMIRS | TP | | NR | NR | NR | NR | NR | 0 |
| NY Spills | 0.125 | 1 | 23 | NR | NR | NR | NR | 24 |
| NY Hist Spills | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| NY SPILLS 90 | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| NJ SPILLS 90 | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| NY SPILLS 80 | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| NJ SPILLS 80 | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| ***Other Ascertainable Records*** | | | | | | | | |
| RCRA NonGen / NLR | 0.250 | | 8 | 53 | NR | NR | NR | 61 |
| FUDS | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| DOD | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| SCRD DRYCLEANERS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| US FIN ASSUR | TP | | NR | NR | NR | NR | NR | 0 |
| EPA WATCH LIST | TP | | NR | NR | NR | NR | NR | 0 |
| 2020 COR ACTION | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| TSCA | TP | | NR | NR | NR | NR | NR | 0 |
| TRIS | TP | | NR | NR | NR | NR | NR | 0 |
| SSTS | TP | | NR | NR | NR | NR | NR | 0 |
| ROD | 1.000 | | 0 | 0 | 1 | 0 | NR | 1 |
| RMP | TP | | NR | NR | NR | NR | NR | 0 |
| RAATS | TP | | NR | NR | NR | NR | NR | 0 |
| PRP | TP | | NR | NR | NR | NR | NR | 0 |
| PADS | TP | | NR | NR | NR | NR | NR | 0 |
| ICIS | TP | | NR | NR | NR | NR | NR | 0 |
| FTTS | TP | | NR | NR | NR | NR | NR | 0 |
| MLTS | TP | | NR | NR | NR | NR | NR | 0 |
| COAL ASH DOE | TP | | NR | NR | NR | NR | NR | 0 |
| COAL ASH EPA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| PCB TRANSFORMER | TP | | NR | NR | NR | NR | NR | 0 |
| RADINFO | TP | | NR | NR | NR | NR | NR | 0 |
| HIST FTTS | TP | | NR | NR | NR | NR | NR | 0 |
| DOT OPS | TP | | NR | NR | NR | NR | NR | 0 |
| CONSENT | 1.000 | | 0 | 0 | 1 | 0 | NR | 1 |
| INDIAN RESERV | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| FUSRAP | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| UMTRA | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| LEAD SMELTERS | TP | | NR | NR | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| US AIRS | TP | | NR | NR | NR | NR | NR | 0 |
| US MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| ABANDONED MINES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| MINES MRDS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| FINDS | TP | 1 | NR | NR | NR | NR | NR | 1 |
| ECHO | TP | 1 | NR | NR | NR | NR | NR | 1 |
| UXO | 1.000 | | 0 | 0 | 0 | 0 | NR | 0 |
| DOCKET HWC | TP | | NR | NR | NR | NR | NR | 0 |
| FUELS PROGRAM | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS NPL | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS FEDERAL SITES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS TRIS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS TSCA | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS RCRA MANIFEST | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS ATSDR | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS WQP | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS PROJECT | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS NPDES | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS ECHO | 0.250 | | 1 | 0 | NR | NR | NR | 1 |
| PFAS ECHO FIRE TRAIN | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| PFAS PT 139 AIRPORT | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| AQUEOUS FOAM NRC | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| BIOSOLIDS | TP | | NR | NR | NR | NR | NR | 0 |
| UST FINDER RELEASE | 0.500 | | 2 | 1 | 8 | NR | NR | 11 |
| UST FINDER | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| E MANIFEST | 0.250 | | 0 | 18 | NR | NR | NR | 18 |
| NY PFAS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NJ PFAS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NY AIRS | TP | | NR | NR | NR | NR | NR | 0 |
| NJ AIRS | TP | | NR | NR | NR | NR | NR | 0 |
| NY COAL ASH | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NJ COAL ASH | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY DRYCLEANERS | 0.250 | | 0 | 4 | NR | NR | NR | 4 |
| NJ DRYCLEANERS | 0.250 | | 0 | 0 | NR | NR | NR | 0 |
| NY E DESIGNATION | 0.125 | | 0 | NR | NR | NR | NR | 0 |
| NJ Financial Assurance | TP | | NR | NR | NR | NR | NR | 0 |
| NY Financial Assurance | TP | | NR | NR | NR | NR | NR | 0 |
| NY HSWDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY LEAD | TP | | NR | NR | NR | NR | NR | 0 |
| NY MANIFEST | 0.250 | 1 | 5 | 67 | NR | NR | NR | 73 |
| NJ MANIFEST | 0.250 | | 4 | 27 | NR | NR | NR | 31 |
| PA MANIFEST | 0.250 | | 0 | 1 | NR | NR | NR | 1 |
| RI MANIFEST | 0.250 | 1 | 0 | 1 | NR | NR | NR | 2 |
| NY SPDES | TP | | NR | NR | NR | NR | NR | 0 |
| NJ NPDES | TP | | NR | NR | NR | NR | NR | 0 |
| NY VAPOR REOPENED | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| NY UIC | TP | | NR | NR | NR | NR | NR | 0 |
| NJ UIC | TP | | NR | NR | NR | NR | NR | 0 |
| NY COOLING TOWERS | TP | | NR | NR | NR | NR | NR | 0 |
| NY MGP | 1.000 | | 0 | 0 | 1 | 0 | NR | 1 |
| NY NYC LAND USE | TP | | NR | NR | NR | NR | NR | 0 |

# MAP FINDINGS SUMMARY

| Database | Search Distance (Miles) | Target Property | < 1/8 | 1/8 - 1/4 | 1/4 - 1/2 | 1/2 - 1 | > 1 | Total Plotted |
|---|---|---|---|---|---|---|---|---|
| NY NYC OER | 1.000 | | 0 | 0 | 0 | 1 | NR | 1 |
| NY ILI | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| DRYCLEANERS | 0.250 | | 0 | 1 | NR | NR | NR | 1 |
| ABAND AIRFIELDS | 0.500 | | 0 | 0 | 0 | NR | NR | 0 |
| **EDR HIGH RISK HISTORICAL RECORDS** | | | | | | | | |
| ***EDR Exclusive Records*** | | | | | | | | |
| EDR MGP | 1.000 | | 0 | 0 | 1 | 0 | NR | 1 |
| EDR Hist Auto | 0.125 | | 5 | NR | NR | NR | NR | 5 |
| EDR Hist Cleaner | 0.125 | | 1 | NR | NR | NR | NR | 1 |
| **EDR RECOVERED GOVERNMENT ARCHIVES** | | | | | | | | |
| ***Exclusive Recovered Govt. Archives*** | | | | | | | | |
| NY RGA HWS | TP | | NR | NR | NR | NR | NR | 0 |
| NJ RGA HWS | TP | | NR | NR | NR | NR | NR | 0 |
| NY RGA LF | TP | | NR | NR | NR | NR | NR | 0 |
| NJ RGA LF | TP | | NR | NR | NR | NR | NR | 0 |
| - Totals -- | | 7 | 77 | 234 | 94 | 1 | 0 | 413 |

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

**A1** **MECHANIC SHOP** **NY Spills** **S121983136**
**Target** **372 RIVERDALE AVE** **N/A**
**Property** **YONKERS, NY**

**Site 1 of 11 in cluster A**

**Actual:** **52 ft.**

SPILLS:

| | |
|---|---|
| Name: | MECHANIC SHOP |
| Address: | 372 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 2506149 / Not Reported |
| Facility ID: | 2506149 |
| Facility Type: | ER |
| DER Facility ID: | 520250 |
| Site ID: | 683635 |
| DEC Region: | 3 |
| Spill Cause: | Deliberate |
| Spill Class: | D2 |
| SWIS: | 6018 |
| Spill Date: | 2025-07-31 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2025-10-07 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Citizen |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 1 |
| Date Entered In Computer: | 2025-10-07 |
| Spill Record Last Update: | 2025-10-07 |
| Spiller Name: | Not reported |
| Spiller Company: | Turbo Auto Sales |
| Spiller Address: | 372 RIVERDALE AVE |
| Spiller Company: | 999 |
| Contact Name: | ADRIAN GONZALES |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 10/7/25 - A vehicle repair shop conducting repairs in their yard, sidewalk and street. Motor oil is allowed to flow from the business to the street drains. The shop also handles used cooking oil and the spills are allowed to flow to the street drains. Refer to DLE. KAB |
| Remarks: | used to be auto sales car dealership and now new owners doing mechanic work on street and oil is everywhere. |

All Materials:

| | |
|---|---|
| Site ID: | 683635 |
| Operable Unit ID: | 1430202 |
| Operable Unit: | 01 |
| Material ID: | 2450441 |
| Material Code: | 0015 |
| Material Name: | motor oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |

**MECHANIC SHOP (Continued)** **S121983136**

| | |
|---|---|
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |
| | |
| Site ID: | 683635 |
| Operable Unit ID: | 1430202 |
| Operable Unit: | 01 |
| Material ID: | 2450447 |
| Material Code: | 0820A |
| Material Name: | cooking oil |
| Case No.: | Not reported |
| Material FA: | Other |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |
| | |
| Name: | TURBO AUTO SALES |
| Address: | 372 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1710340 / 2018-04-16 |
| Facility ID: | 1710340 |
| Facility Type: | ER |
| DER Facility ID: | 520250 |
| Site ID: | 566860 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2018-02-15 |
| Investigator: | RDBENDEL |
| Referred To: | Not reported |
| Reported to Dept: | 2018-02-15 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2018-02-15 |
| Spill Record Last Update: | 2018-04-16 |
| Spiller Name: | DANIEL RAMONO |
| Spiller Company: | TURBO AUTO SALES |
| Spiller Address: | 372 RIVERDALE AVE |
| Spiller Company: | 001 |
| Contact Name: | DAMIEN COLEMAN |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 2/15/18 Hudson Valley Environmental pulled a 3000 gallon UST that had been previously abandoned in place in the 1990’s when the previous owners (Good Year) converted to gas. Current owner thought |

**MECHANIC SHOP (Continued)** **S121983136**

that the tank had been removed. Holes were found in tank, soil impacted. No gw impacts at this time. No waterways on property, business on municipal water. Hudson Valley Env. to do remediation. Sending draft guidance by e-mail. ga 2/15/18: This tank was removed by Hudson Valley Environmental and the contaminated soil was stockpiled on site under poly liner. Both the Yonkers FD and WCDoH were here yesterday. The owner is being required to excavate the slab underneath the tank and get all contaminated soil disposed of. The auto garage operator doesn't have a PBS registration and no tanks are on site. I left a message on Carlos' voicemail to try and get more information about the tank registration. At this time the property owner is trying to turn the lot into a CVS so he wants the contamination cleaned up ASAP. BR 4/16/18 Sebastian Bimonte, WCDoH, email to RDB: Contamination encountered during removal of a 3500 gallon #2 heating oil tank. Hudson Valley Environmental excavated and transported a total of 221.87 tons of contaminated soil to Clean Earth of Carteret located in Carteret NJ. The tank was disposed of at Brookfield Resource Management in Elmsford NY. A total of 8 post excavation samples were collected and analyzed at Phoenix Environmental Laboratories. Sample results were below CP-51 clean up objectives. NFA. SRK

Remarks: TANK REMOVAL, C/U PENDING

All Materials:

| | |
|---|---|
| Site ID: | 566860 |
| Operable Unit ID: | 1314778 |
| Operable Unit: | 01 |
| Material ID: | 2322465 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**A2** **372 RIVERDALE AVENUE** **NY UST** **U004439217**
**Target** **372 RIVERDALE AVENUE** **N/A**
**Property** **YONKERS, NY 10705**

**Site 2 of 11 in cluster A**

**Actual:** **52 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | 372 RIVERDALE AVENUE |
| Address: | 372 RIVERDALE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-802158 / Active |
| Operator Name: | Not reported |
| Owner Name: | Daniel Romano |

**372 RIVERDALE AVENUE (Continued)** **U004439217**

| | |
|---|---|
| Owner Street: | 2168 Central Park Avenue |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10710 |
| GDS Number: | Not reported |
| Tank Number: | 1 |
| Status: | 2. Temporarily out of service |
| Capacity: | 3500 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/01/1950 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 0. No Piping |
| Piping Type: | 0. No Piping |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | Not reported |

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**A3** **GOODYEAR AUTO SERVICE CENTER** **RCRA-VSQG** **1004756535**
**Target** **372 RIVERDALE AVE** **FINDS** **NYD135534493**
**Property** **YONKERS, NY 10705** **ECHO**
**RI MANIFEST**
**Site 3 of 11 in cluster A** **NY MANIFEST**

**Actual:** **52 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20070101 |
| Handler Name: | Goodyear Auto Service Center |
| Handler Address: | Riverdale Ave |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYD135534493 |
| Contact Name: | Not reported |
| Contact Address: | JERSEY AVE |
| Contact City,State,Zip: | NORTH BRUNSWICK, NY 08902 |
| Contact Telephone: | Not reported |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Not reported |
| Federal Waste Generator Description: | Conditionally Exempt Small Quantity Generator |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Handler Activities |
| State District Owner: | Ny |
| State District: | NYSDEC R3 |
| Mailing Address: | JERSEY AVE |
| Mailing City,State,Zip: | NORTH BRUNSWICK, NY 08902 |

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

| | | |
|---|---|---|
| Owner Name: | Goodyear T & R Co | |
| Owner Type: | | Private |
| Operator Name: | Goodyear T & R Co | |
| Operator Type: | | Private |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20150414 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Hazardous Waste Summary:

| | |
|---|---|
| Waste Code: | D001 |
| Waste Description: | Ignitable Waste |
| Waste Code: | F003 |
| Waste Description: | The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated |

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.

Waste Code: X001
Waste Description: Not Defined

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: GOODYEAR T & R CO
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, WY 99999
Owner/Operator Telephone: 212-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: GOODYEAR T & R CO
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, WY 99999
Owner/Operator Telephone: 212-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: GOODYEAR T & R CO
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, WY 99999
Owner/Operator Telephone: 212-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 19931029
Handler Name: GOODYEAR AUTO SERVICE CENTER
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20060101
Handler Name: GOODYEAR AUTO SERVICE CENTER
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20070101
Handler Name: GOODYEAR AUTO SERVICE CENTER
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19861031
Handler Name: GOODYEAR AUTO SERVICE CENTER
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Has the Facility Received Notices of Violations:
Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

| | |
|---|---|
| Scheduled Compliance Date: | Not reported |
| Enforcement Identifier: | Not reported |
| Date of Enforcement Action: | Not reported |
| Enforcement Responsible Agency: | Not reported |
| Enforcement Docket Number: | Not reported |
| Enforcement Attorney: | Not reported |
| Corrective Action Component: | Not reported |
| Appeal Initiated Date: | Not reported |
| Appeal Resolution Date: | Not reported |
| Disposition Status Date: | Not reported |
| Disposition Status: | Not reported |
| Disposition Status Description: | Not reported |
| Consent/Final Order Sequence Number: | Not reported |
| Consent/Final Order Respondent Name: | Not reported |
| Consent/Final Order Lead Agency: | Not reported |
| Enforcement Type: | Not reported |
| Enforcement Responsible Person: | Not reported |
| Enforcement Responsible Sub-Organization: | Not reported |
| SEP Sequence Number: | Not reported |
| SEP Expenditure Amount: | Not reported |
| SEP Scheduled Completion Date: | Not reported |
| SEP Actual Date: | Not reported |
| SEP Defaulted Date: | Not reported |
| SEP Type: | Not reported |
| SEP Type Description: | Not reported |
| Proposed Amount: | Not reported |
| Final Monetary Amount: | Not reported |
| Paid Amount: | Not reported |
| Final Count: | Not reported |
| Final Amount: | Not reported |

Evaluation Action Summary:

| | |
|---|---|
| Evaluation Date: | 20121024 |
| Evaluation Responsible Agency: | State |
| Found Violation: | No |
| Evaluation Type Description: | COMPLIANCE EVALUATION INSPECTION |
| Evaluation Responsible Person Identifier: | NYWME |
| Evaluation Responsible Sub-Organization: | R3 |
| Actual Return to Compliance Date: | Not reported |
| Scheduled Compliance Date: | Not reported |
| Date of Request: | Not reported |
| Date Response Received: | Not reported |
| Request Agency: | Not reported |
| Former Citation: | Not reported |

FINDS:

Registry ID: 110004382819

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters,

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

storers, and disposers of hazardous waste.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

| | |
|---|---|
| Envid: | 1004756535 |
| Registry ID: | 110004382819 |
| DFR URL: | |
| Name: | GOODYEAR AUTO SERVICE CENTER |
| Address: | 372 Riverdale Ave |
| City,State,Zip: | YONKERS, NY 10705 |

RI MANIFEST:

| | |
|---|---|
| Name: | GOODYEAR |
| Address: | 372 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 |
| EPA Id: | NYD135534493 |
| GEN Cert Date: | 12/28/2010 |
| Manifest Document Number: | 003638364FLE |
| Waste Description: | HAZARDOUS WASTE LIQUID NOS |
| TSDF Id: | RID084802842 |
| TSDF Name: | SAFETY KLEEN |
| Qty: | 4 |
| WT/Vol Units: | G |
| TSDF Date: | 1/7/2011 |
| Transporter 2 Id: | NJD071629976 |
| Item Number: | 1 |
| Transporter 2 Name: | 1/7/2011 |
| Transporter Name 2: | SAFETY KLEEN |
| Transporter EPAID: | TXR000050930 |
| Transporter Receipt Date: | 12/28/2010 |
| Number Of Containers: | 1 |
| Container Type: | DF |
| Waste Code1: | D039 |
| Waste Code2: | T |
| Waste Code3: | Not reported |
| Waste Code4: | Not reported |
| Waste Code5: | Not reported |
| Waste Code6: | Not reported |
| Fee Exempt Code: | Not reported |
| Comment: | Not reported |
| Transporter Name 2: | SJ TRANSPORTATION CO INC |
| Company Permit Number: | Not reported |
| Year: | Not reported |
| Quarter: | Not reported |
| Transporter Contact Name: | Not reported |
| Transporter Contact Email: | Not reported |
| Filing Date: | Not reported |
| Total Fee: | Not reported |
| Billing Name: | Not reported |
| Paid Date: | Not reported |
| Paid Time: | Not reported |
| Facility Receipt Date: | Not reported |
| Fee: | Not reported |
| Manifest Created Date: | Not reported |

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

Manifest Updated Date: Not reported

RI MANIFEST:

| | |
|---|---|
| Transporter Receipt Date: | 3/22/2011 |
| Number Of Containers: | 1 |
| Container Type: | DF |
| Waste Code1: | D039 |
| Waste Code2: | T |
| Waste Code3: | Not reported |
| Waste Code4: | Not reported |
| Waste Code5: | Not reported |
| Waste Code6: | Not reported |
| Comment: | Not reported |
| Fee Exempt Code: | Not reported |
| TSDF Name: | SAFETY KLEEN |
| TSDF Id: | RID084802842 |
| Transporter Name 2: | SJ TRANSPORTATION CO INC |
| Company Permit Number: | Not reported |
| Year: | Not reported |
| EPA ID: | NYD135534493 |
| Manifest Docket Number: | 004293560FLE |
| Quarter: | Not reported |
| Waste Description: | HAZARDOUS WASTE LIQUID NOS |
| Transporter Contact Name: | Not reported |
| Quantity: | 4 |
| Transporter Contact Email: | Not reported |
| WT/Vol Units: | G |
| Filing Date: | Not reported |
| Total Fee: | Not reported |
| Item Number: | 1 |
| Transporter Name: | SAFETY KLEEN |
| Billing Name: | Not reported |
| Transporter EPA ID: | TXR000050930 |
| Date Paid: | Not reported |
| Time Paid: | Not reported |
| GEN Cert Date: | 3/22/2011 |
| Facility Receipt Date: | Not reported |
| Fee: | Not reported |
| Transporter 2 Receipt Date: | 3/25/2011 |
| Manifest Created Date: | Not reported |
| TSDF Receipt Date: | 3/25/2011 |
| Transporter 2 ID: | NJD071629976 |
| Manifest Updated Date: | Not reported |

| | |
|---|---|
| Transporter Receipt Date: | 3/22/2011 |
| Number Of Containers: | 1 |
| Container Type: | DF |
| Waste Code1: | D039 |
| Waste Code2: | T |
| Waste Code3: | Not reported |
| Waste Code4: | Not reported |
| Waste Code5: | Not reported |
| Waste Code6: | Not reported |
| Comment: | Not reported |
| Fee Exempt Code: | Not reported |
| TSDF Name: | SAFETY KLEEN |
| TSDF Id: | RID084802842 |
| Transporter Name 2: | SJ TRANSPORTATION CO INC |

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

| | |
|---|---|
| Company Permit Number: | Not reported |
| Year: | Not reported |
| EPA ID: | NYD135534493 |
| Manifest Docket Number: | 004293560FLE |
| Quarter: | Not reported |
| Waste Description: | HAZARDOUS WASTE LIQUID NOS |
| Transporter Contact Name: | Not reported |
| Quantity: | 4 |
| Transporter Contact Email: | Not reported |
| WT/Vol Units: | G |
| Filing Date: | Not reported |
| Total Fee: | Not reported |
| Item Number: | 1 |
| Transporter Name: | SAFETY KLEEN |
| Billing Name: | Not reported |
| Transporter EPA ID: | TXR000050930 |
| Date Paid: | Not reported |
| Time Paid: | Not reported |
| GEN Cert Date: | 3/22/2011 |
| Facility Receipt Date: | Not reported |
| Fee: | Not reported |
| Transporter 2 Receipt Date: | 3/25/2011 |
| Manifest Created Date: | Not reported |
| TSDF Receipt Date: | 3/25/2011 |
| Transporter 2 ID: | NJD071629976 |
| Manifest Updated Date: | Not reported |
| | |
| Transporter Receipt Date: | 12/28/2010 |
| Number Of Containers: | 1 |
| Container Type: | DF |
| Waste Code1: | D039 |
| Waste Code2: | T |
| Waste Code3: | Not reported |
| Waste Code4: | Not reported |
| Waste Code5: | Not reported |
| Waste Code6: | Not reported |
| Comment: | Not reported |
| Fee Exempt Code: | Not reported |
| TSDF Name: | SAFETY KLEEN |
| TSDF Id: | RID084802842 |
| Transporter Name 2: | SJ TRANSPORTATION CO INC |
| Company Permit Number: | Not reported |
| Year: | Not reported |
| EPA ID: | NYD135534493 |
| Manifest Docket Number: | 003638364FLE |
| Quarter: | Not reported |
| Waste Description: | HAZARDOUS WASTE LIQUID NOS |
| Transporter Contact Name: | Not reported |
| Quantity: | 4 |
| Transporter Contact Email: | Not reported |
| WT/Vol Units: | G |
| Filing Date: | Not reported |
| Total Fee: | Not reported |
| Item Number: | 1 |
| Transporter Name: | SAFETY KLEEN |
| Billing Name: | Not reported |
| Transporter EPA ID: | TXR000050930 |

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

| | |
|---|---|
| Date Paid: | Not reported |
| Time Paid: | Not reported |
| GEN Cert Date: | 12/28/2010 |
| Facility Receipt Date: | Not reported |
| Fee: | Not reported |
| Transporter 2 Receipt Date: | 1/7/2011 |
| Manifest Created Date: | Not reported |
| TSDF Receipt Date: | 1/7/2011 |
| Transporter 2 ID: | NJD071629976 |
| Manifest Updated Date: | Not reported |

| | |
|---|---|
| Transporter Receipt Date: | 12/28/2010 |
| Number Of Containers: | 1 |
| Container Type: | DF |
| Waste Code1: | D039 |
| Waste Code2: | T |
| Waste Code3: | Not reported |
| Waste Code4: | Not reported |
| Waste Code5: | Not reported |
| Waste Code6: | Not reported |
| Comment: | Not reported |
| Fee Exempt Code: | Not reported |
| TSDF Name: | SAFETY KLEEN |
| TSDF Id: | RID084802842 |
| Transporter Name 2: | SJ TRANSPORTATION CO INC |
| Company Permit Number: | Not reported |
| Year: | Not reported |
| EPA ID: | NYD135534493 |
| Manifest Docket Number: | 003638364FLE |
| Quarter: | Not reported |
| Waste Description: | HAZARDOUS WASTE LIQUID NOS |
| Transporter Contact Name: | Not reported |
| Quantity: | 4 |
| Transporter Contact Email: | Not reported |
| WT/Vol Units: | G |
| Filing Date: | Not reported |
| Total Fee: | Not reported |
| Item Number: | 1 |
| Transporter Name: | SAFETY KLEEN |
| Billing Name: | Not reported |
| Transporter EPA ID: | TXR000050930 |
| Date Paid: | Not reported |
| Time Paid: | Not reported |
| GEN Cert Date: | 12/28/2010 |
| Facility Receipt Date: | Not reported |
| Fee: | Not reported |
| Transporter 2 Receipt Date: | 1/7/2011 |
| Manifest Created Date: | Not reported |
| TSDF Receipt Date: | 1/7/2011 |
| Transporter 2 ID: | NJD071629976 |
| Manifest Updated Date: | Not reported |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYD135534493 |
| Country: | USA |
| Name: | Goodyear |

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

| | |
|---|---|
| Address: | 372 RIVERDALE AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | 372 RIVERDALE AVENUE |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Goodyear |
| Mailing Contact: | Michael Owens |
| Mailing Address 1: | 372 RIVERDALE AVENUE |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | YONKERS, NY 10705 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 9149653333 |

Manifest Data:

| | |
|---|---|
| Document ID: | PAC8615854 |
| Manifest Status: | Not reported |
| Trans1 State ID: | PAAH0172 |
| Year: | 1992 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 11/04/1992 |
| Trans1 Recv Date: | 11/04/1992 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 11/06/1992 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD135534493 |
| Trans1 EPA ID: | ILD051060408 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | PAD987266715 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Lead |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

| | |
|---|---|
| Quantity: | 00165 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | TXR000050930 |
| Year: | 2018 |
| Trans2 State ID: | NJD071629976 |
| Generator Ship Date: | 03/22/2011 |
| Trans1 Recv Date: | 03/22/2011 |
| Trans2 Recv Date: | 03/25/2011 |
| TSD Site Recv Date: | 03/28/2011 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD135534493 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | RID084802842 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 004293560FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Tetrachloroethylene |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 4 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 1 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 1 |
| | |
| Document ID: | PAC9711181 |
| Manifest Status: | Not reported |
| Trans1 State ID: | PAAH0172 |

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

| | |
|---|---|
| Year: | 1993 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 02/05/1993 |
| Trans1 Recv Date: | 02/05/1993 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 02/15/1993 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD135534493 |
| Trans1 EPA ID: | ILD051060408 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | PAD987266715 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Lead |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00225 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | PAC6698296 |
| Manifest Status: | Not reported |
| Trans1 State ID: | PAAH0172 |
| Year: | 1992 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 03/17/1992 |
| Trans1 Recv Date: | 03/17/1992 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 03/18/1992 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD135534493 |
| Trans1 EPA ID: | ILD051060408 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | PAD981737109 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

| | |
|---|---|
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Lead |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00050 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | TXR000050930 |
| Year: | 2018 |
| Trans2 State ID: | NJD071629976 |
| Generator Ship Date: | 12/28/2010 |
| Trans1 Recv Date: | 12/28/2010 |
| Trans2 Recv Date: | 01/07/2011 |
| TSD Site Recv Date: | 01/10/2011 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD135534493 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | RID084802842 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 003638364FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Tetrachloroethylene |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

| | |
|---|---|
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 4 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 1 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 1 |
| | |
| Document ID: | NYC2523429 |
| Manifest Status: | Not reported |
| Trans1 State ID: | P39266IL |
| Year: | 1993 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 10/06/1993 |
| Trans1 Recv Date: | 10/06/1993 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 10/22/1993 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD135534493 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | VAD105838874 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Lead |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00205 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Recycle |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | TXR000050930 |
| Year: | 2018 |

**GOODYEAR AUTO SERVICE CENTER (Continued)** **1004756535**

| | |
|---|---|
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/13/2011 |
| Trans1 Recv Date: | 06/13/2011 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/21/2011 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD135534493 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | RID084802842 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 004246315FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Tetrachloroethylene |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 4 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 1 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**NPL** **HUDSON RIVER PCBS** **NPL** **1000384273**
**Region** **NO STREET APPLICABLE** **SEMS** **NYD980763841**
**WNW** **HUDSON RIVER, NY 12871** **RCRA-LQG**
**1/4-1/2** **US ENG CONTROLS**
**2048 ft.** **US INST CONTROLS**
**NY Spills**
**ROD**
**PRP**
**CONSENT**

NPL:

| | |
|---|---|
| EPA Region: | 2 |
| EPA ID: | NYD980763841 |
| Site ID: | 202229 |

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | |
|---|---|
| Name: | Hudson River Pcbs |
| Address: | No Street Applicable |
| City,State,Zip: | HUDSON RIVER, NY 12871 |
| Federal: | N |
| Final Date: | 1984-09-21 00:00:00 |
| Latitude: | 43.1102 |
| Longitude: | -73.5765 |
| Site Score: | 54.659999999999997 |
| NAI: | Not reported |
| Native American Entity: | Not reported |

Substance as of 08/2019:

| | |
|---|---|
| NPL Status: | Currently on the Final NPL |
| Substance ID: | Not reported |
| CAS Number: | Not reported |
| Substance: | Not reported |
| Pathway: | Not reported |
| Scoring: | Not reported |

| | |
|---|---|
| NPL Status: | Currently on the Final NPL |
| Substance ID: | A046 |
| CAS Number: | 1336-36-3 |
| Substance: | POLYCHLORINATED BIPHENYLS |
| Pathway: | AIR PATHWAY |
| Scoring: | 4 |

| | |
|---|---|
| NPL Status: | Currently on the Final NPL |
| Substance ID: | A046 |
| CAS Number: | 1336-36-3 |
| Substance: | POLYCHLORINATED BIPHENYLS |
| Pathway: | SURFACE WATER PATHWAY |
| Scoring: | 4 |

Summary Details:

Conditions at listing September 1983): The Hudson River PCBs Site is a 40-mile stretch of the Hudson River between Mechanicville and Fort Edward, New York. General Electric Co. discharged an estimated l.l million pounds of PCBs into this stretch of river. The State has identified 40 hot spots, defined as sediments contaminated with greater than 50 parts per million ppm) of PCBs. Also included in the site are five remnant areas, which are river sediments exposed when thelevel of the river was lowered due to removal of the Fort Edward Dam. The State has taken initial measures to stabili e the remnant areas from erosion. In September 1980, Congress passed an amendment to the Clean Water Act CWA) that included the Hudson River PCB Reclamation Demonstration Project. Under this legislation, the EPA Administrator could authori e a 75 percent grant, not to exceed 20 million. EPA issued a final Environmental Impact Statement in October 1982 evaluating various dredging alternatives for a demonstration project. EPA has prepared a feasibility study to evaluate alternative remedial actions under CERCLA. The Administrator has determined that CERCLA funds may be used for remedial action atthe remnant areas and for evaluating the effectiveness of the water supply system at Waterford, New York. Status June 1984): EPA has completed a draft feasibility study identifying alternatives for remedial action. A search for partiespotentially responsible for wastes associated with the site has been completed, and EPA has sent letters to two potentially responsible parties notifying them of possible legal action under CERCLA.

**HUDSON RIVER PCBS (Continued)** **1000384273**

Category as of 08/2019:
NPL Status: Currently on the Final NPL
Category Description: Depth To Aquifer-<= 10 Feet
Category Value: 0

NPL Status: Currently on the Final NPL
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value: 10

Narratives as of 08/2019:
NPL Name: HUDSON RIVER PCBS

Site as of 08/2019:
EPA Region: 02
Site ID: 0202229
Site Status: F
Federal Site: N
Date Deleted: Not reported
Date Finalized: 09/21/84
Date Proposed: 09/08/83

Site Status as of 08/2019:
Proposed Date: 09/08/1983
Final Date: 09/21/1984
Deleted Date: Not reported
NPL Status: Final

Narr:
Site Name: Hudson River Pcbs
Site EPA ID: NYD980763841
Listing Date: 9/21/1984
Site Score: 54.66
Federal Facility Indicator: No

Site List URL:

Site Progress URL:

Federal Register URL:

Site Location URL:

SEMS:
Site ID: 0202229
EPA ID: NYD980763841
Name: HUDSON RIVER PCBS
Address: NO STREET APPLICABLE
Address 2: Not reported
City,State,Zip: HUDSON RIVER, NY 12871-2834
Cong District: 21
FIPS Code: 36115
Latitude: +43.110200
Longitude: -073.576500

**HUDSON RIVER PCBS (Continued)** **1000384273**

FF: N
NPL: Currently on the Final NPL
Non NPL Status: Not reported

SEMS Detail:

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 00
Action Code: AR
Action Name: ADMIN REC
SEQ: 2
Start Date: 2000-03-28 05:00:00
Finish Date: Not reported
Qual: V
Current Action Lead: EPA Perf

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 00
Action Code: CR
Action Name: CI
SEQ: 1
Start Date: 1991-09-30 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 00
Action Code: CR
Action Name: CI
SEQ: 2
Start Date: 2002-03-25 05:00:00
Finish Date: 2006-11-02 05:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 00
Action Code: CR

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | |
|---|---|
| Action Name: | CI |
| SEQ: | 3 |
| Start Date: | 2005-11-07 05:00:00 |
| Finish Date: | Not reported |
| Qual: | Not reported |
| Current Action Lead: | EPA Perf |
| | |
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 00 |
| Action Code: | SS |
| Action Name: | ESI RI |
| SEQ: | 1 |
| Start Date: | 2002-06-30 04:00:00 |
| Finish Date: | 2005-08-31 04:00:00 |
| Qual: | W |
| Current Action Lead: | EPA Perf |
| | |
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 00 |
| Action Code: | FE |
| Action Name: | 5 YEAR |
| SEQ: | 1 |
| Start Date: | 2012-06-01 05:00:00 |
| Finish Date: | 2012-06-01 05:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Perf |
| | |
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 00 |
| Action Code: | FE |
| Action Name: | 5 YEAR |
| SEQ: | 2 |
| Start Date: | 2016-03-29 05:00:00 |
| Finish Date: | 2019-04-11 05:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Perf In-Hse |
| | |
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |

**HUDSON RIVER PCBS (Continued)** **1000384273**

FF: N
OU: 00
Action Code: FE
Action Name: 5 YEAR
SEQ: 3
Start Date: 2025-01-15 06:00:00
Finish Date: 2025-01-15 06:00:00
Qual: Not reported
Current Action Lead: EPA Perf In-Hse

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 00
Action Code: RS
Action Name: RV ASSESS
SEQ: 1
Start Date: 1990-04-17 04:00:00
Finish Date: 1990-08-21 04:00:00
Qual: S
Current Action Lead: EPA Perf

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 00
Action Code: RS
Action Name: RV ASSESS
SEQ: 5
Start Date: 1992-12-01 05:00:00
Finish Date: 1992-12-01 05:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 00
Action Code: NF
Action Name: NPL FINL
SEQ: 1
Start Date: 1984-09-21 05:00:00
Finish Date: 1984-09-21 05:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 02
Site ID: 0202229

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | |
|---|---|
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 00 |
| Action Code: | NP |
| Action Name: | PROPOSED |
| SEQ: | 1 |
| Start Date: | 1983-09-08 04:00:00 |
| Finish Date: | 1983-09-08 04:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Perf |

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 00 |
| Action Code: | PA |
| Action Name: | PA |
| SEQ: | 1 |
| Start Date: | 1983-09-01 04:00:00 |
| Finish Date: | 1983-09-01 04:00:00 |
| Qual: | L |
| Current Action Lead: | EPA Perf |

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 00 |
| Action Code: | EL |
| Action Name: | PRP CR |
| SEQ: | 1 |
| Start Date: | 1989-07-07 04:00:00 |
| Finish Date: | Not reported |
| Qual: | Not reported |
| Current Action Lead: | EPA Ovrsght |

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 00 |
| Action Code: | PJ |
| Action Name: | RP EM REM |
| SEQ: | 1 |
| Start Date: | 2007-08-24 04:00:00 |
| Finish Date: | 2007-08-27 04:00:00 |
| Qual: | C |
| Current Action Lead: | EPA Ovrsght |

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 00 |
| Action Code: | DS |
| Action Name: | DISCVRY |
| SEQ: | 1 |
| Start Date: | 1983-07-01 04:00:00 |
| Finish Date: | 1983-07-01 04:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Perf |

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 00 |
| Action Code: | SI |
| Action Name: | SI |
| SEQ: | 1 |
| Start Date: | 1983-08-01 04:00:00 |
| Finish Date: | 1983-09-01 04:00:00 |
| Qual: | H |
| Current Action Lead: | EPA Perf |

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 00 |
| Action Code: | MA |
| Action Name: | ST COOP |
| SEQ: | 2 |
| Start Date: | 1991-02-22 05:00:00 |
| Finish Date: | 2007-04-03 04:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Perf |

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 00 |
| Action Code: | TG |
| Action Name: | TA GRANT |
| SEQ: | 1 |
| Start Date: | 1995-09-29 04:00:00 |
| Finish Date: | 2005-09-20 04:00:00 |

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | |
|---|---|
| Qual: | Not reported |
| Current Action Lead: | EPA Perf |
| | |
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 01 |
| Action Code: | RD |
| Action Name: | RD |
| SEQ: | 1 |
| Start Date: | 1984-09-28 05:00:00 |
| Finish Date: | 1990-05-18 04:00:00 |
| Qual: | Not reported |
| Current Action Lead: | St Perf |
| | |
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 01 |
| Action Code: | RD |
| Action Name: | RD |
| SEQ: | 2 |
| Start Date: | 1989-02-02 05:00:00 |
| Finish Date: | 1989-06-05 04:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Perf |
| | |
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 01 |
| Action Code: | CO |
| Action Name: | RI/FS |
| SEQ: | 1 |
| Start Date: | 1984-03-30 06:00:00 |
| Finish Date: | 1984-09-25 05:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Perf |
| | |
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 01 |
| Action Code: | BF |
| Action Name: | PRP RA |

**HUDSON RIVER PCBS (Continued)** **1000384273**

SEQ: 1
Start Date: 1989-10-13 04:00:00
Finish Date: 1992-09-29 04:00:00
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 01
Action Code: BF
Action Name: PRP RA
SEQ: 2
Start Date: 1990-09-28 04:00:00
Finish Date: 1992-09-29 04:00:00
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 01
Action Code: BE
Action Name: PRP RD
SEQ: 1
Start Date: 1989-05-18 04:00:00
Finish Date: 1991-01-07 05:00:00
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 01
Action Code: BE
Action Name: PRP RD
SEQ: 2
Start Date: 1989-09-27 04:00:00
Finish Date: 1990-09-28 04:00:00
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N

**HUDSON RIVER PCBS (Continued)** **1000384273**

OU: 01
Action Code: RO
Action Name: ROD
SEQ: 1
Start Date: 1984-09-25 05:00:00
Finish Date: 1984-09-25 05:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 02
Action Code: AR
Action Name: ADMIN REC
SEQ: 1
Start Date: 1992-04-24 04:00:00
Finish Date: Not reported
Qual: E
Current Action Lead: EPA Perf

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 02
Action Code: RA
Action Name: RA
SEQ: 2
Start Date: 2008-05-09 04:00:00
Finish Date: 2009-11-24 05:00:00
Qual: FR
Current Action Lead: EPA Perf

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 02
Action Code: RA
Action Name: RA
SEQ: 3
Start Date: 2008-12-04 05:00:00
Finish Date: 2009-12-23 05:00:00
Qual: FR
Current Action Lead: EPA Perf

Region: 02
Site ID: 0202229
EPA ID: NYD980763841

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | |
|---|---|
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 02 |
| Action Code: | CO |
| Action Name: | RI/FS |
| SEQ: | 2 |
| Start Date: | 1990-07-25 04:00:00 |
| Finish Date: | 2002-02-01 05:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Perf |

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 02 |
| Action Code: | OM |
| Action Name: | OM |
| SEQ: | 1 |
| Start Date: | 2019-04-11 05:00:00 |
| Finish Date: | Not reported |
| Qual: | Not reported |
| Current Action Lead: | EPA Ovrsght |

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 02 |
| Action Code: | BF |
| Action Name: | PRP RA |
| SEQ: | 3 |
| Start Date: | 2005-09-06 04:00:00 |
| Finish Date: | 2012-09-04 05:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Ovrsght |

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 02 |
| Action Code: | BF |
| Action Name: | PRP RA |
| SEQ: | 4 |
| Start Date: | 2010-12-31 05:00:00 |
| Finish Date: | 2019-04-11 05:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Ovrsght |

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 02 |
| Action Code: | BE |
| Action Name: | PRP RD |
| SEQ: | 3 |
| Start Date: | 2002-07-23 04:00:00 |
| Finish Date: | 2003-08-14 04:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Ovrsght |

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 02 |
| Action Code: | BE |
| Action Name: | PRP RD |
| SEQ: | 4 |
| Start Date: | 2003-08-14 04:00:00 |
| Finish Date: | 2008-01-25 05:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Ovrsght |

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 02 |
| Action Code: | BE |
| Action Name: | PRP RD |
| SEQ: | 6 |
| Start Date: | 2003-08-14 04:00:00 |
| Finish Date: | 2011-04-26 05:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Ovrsght |

| | |
|---|---|
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 02 |
| Action Code: | RO |
| Action Name: | ROD |
| SEQ: | 2 |
| Start Date: | 2002-02-01 05:00:00 |
| Finish Date: | 2002-02-01 05:00:00 |

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | |
|---|---|
| Qual: | R |
| Current Action Lead: | EPA Perf |
| | |
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 03 |
| Action Code: | RV |
| Action Name: | RMVL |
| SEQ: | 1 |
| Start Date: | 1999-10-06 04:00:00 |
| Finish Date: | 2001-09-14 04:00:00 |
| Qual: | S |
| Current Action Lead: | EPA Perf |
| | |
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 03 |
| Action Code: | RS |
| Action Name: | RV ASSESS |
| SEQ: | 2 |
| Start Date: | 1992-11-19 05:00:00 |
| Finish Date: | 1992-12-01 05:00:00 |
| Qual: | S |
| Current Action Lead: | EPA Perf |
| | |
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 03 |
| Action Code: | RS |
| Action Name: | RV ASSESS |
| SEQ: | 3 |
| Start Date: | 1998-06-03 04:00:00 |
| Finish Date: | 1999-06-24 04:00:00 |
| Qual: | Not reported |
| Current Action Lead: | EPA Perf |
| | |
| Region: | 02 |
| Site ID: | 0202229 |
| EPA ID: | NYD980763841 |
| Site Name: | Hudson River Pcbs |
| NPL: | F |
| FF: | N |
| OU: | 03 |
| Action Code: | RS |
| Action Name: | RV ASSESS |

**HUDSON RIVER PCBS (Continued)** **1000384273**

SEQ: 4
Start Date: 1998-10-14 04:00:00
Finish Date: 1999-01-07 05:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 04
Action Code: BD
Action Name: PRP RI/FS
SEQ: 1
Start Date: 2008-09-08 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 02
Site ID: 0202229
EPA ID: NYD980763841
Site Name: Hudson River Pcbs
NPL: F
FF: N
OU: 04
Action Code: BB
Action Name: PRP RV
SEQ: 1
Start Date: 2007-09-11 04:00:00
Finish Date: 2012-04-10 04:00:00
Qual: S
Current Action Lead: EPA Ovrsght

RCRA Listings:
Date Form Received by Agency: 20180215
Handler Name: Ge Hudson River Sediment Remediation Processing And Transportation Facility
Handler Address: Lock 8 Way
Handler City,State,Zip: HUDSON FALLS, NY 12839
EPA ID: NYD980763841
Contact Name: ROBERT G GIBSON
Contact Address: RIVER ROAD
Contact City,State,Zip: SCHENECTADY, NY 12345
Contact Telephone: 518-388-7505
Contact Fax: Not reported
Contact Email: BOB.GIBSON@GE.COM
Contact Title: SENIOR PROJECT MANAGER
EPA Region: 02
Land Type: Other
Federal Waste Generator Description: Large Quantity Generator
Non-Notifier: Not reported
Biennial Report Cycle: 2017
Accessibility: Not reported

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | | |
|---|---|---|
| Active Site Indicator: | | Handler Activities |
| State District Owner: | | Ny |
| State District: | | NYSDEC R5 |
| Mailing Address: | | RIVER ROAD |
| Mailing City,State,Zip: | | SCHENECTADY, NY 12345 |
| Owner Name: | See Comments In Section 18 | |
| Owner Type: | | Other |
| Operator Name: | General Electric Company | |
| Operator Type: | | Private |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20181106 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Biennial: List of Years
Year: 2017

Click Here for Biennial Reporting System Data:
Year: 2013

**HUDSON RIVER PCBS (Continued)** **1000384273**

Click Here for Biennial Reporting System Data:
Year: 2011

Click Here for Biennial Reporting System Data:
Year: 2009

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D006
Waste Description: Cadmium

Waste Code: D007
Waste Description: Chromium

Waste Code: D008
Waste Description: Lead

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: CANADIAN PACIFIC RR
Legal Status: Private
Date Became Current: 20070423
Date Ended Current: Not reported
Owner/Operator Address: 9TH AVE SW
Owner/Operator City,State,Zip: CALGARY T2P 4Z4
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: GENERAL ELECTRIC COMPANY
Legal Status: Private
Date Became Current: 20070423
Date Ended Current: Not reported
Owner/Operator Address: 1 RIVER ROAD
Owner/Operator City,State,Zip: SCHENECTADY, NY 12345
Owner/Operator Telephone: 518-388-7505
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: GENERAL ELECTRIC COMPANY
Legal Status: Private
Date Became Current: 20070423
Date Ended Current: Not reported
Owner/Operator Address: 9TH AVE SW
Owner/Operator City,State,Zip: CALGARY T2P 4Z4
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: SEE COMMENTS IN SECTION 18 | |
| Legal Status: | Other |
| Date Became Current: | 20070204 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 446 LOCK WAY |
| Owner/Operator City,State,Zip: | HUDSON FALLS, NY 12839 |
| Owner/Operator Telephone: | Not reported |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: USEPA | |
| Legal Status: | Federal |
| Date Became Current: | 20080604 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | Not reported |
| Owner/Operator City,State,Zip: | Not reported |
| Owner/Operator Telephone: | Not reported |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: CANADIAN PACIFIC RAILROAD | |
| Legal Status: | Private |
| Date Became Current: | 20070502 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 401 9TH AVE SW |
| Owner/Operator City,State,Zip: | CALGARY, AB T2P4Z4 |
| Owner/Operator Telephone: | Not reported |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: SEE SECTION 11 COMMENTS | |
| Legal Status: | State |
| Date Became Current: | 20070502 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | Not reported |
| Owner/Operator City,State,Zip: | NY |
| Owner/Operator Telephone: | Not reported |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: GE HUDSON RIVER SEDIMENT REMEDIATION | |
| Legal Status: | Private |
| Date Became Current: | 20070423 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 381 BROADWAY |
| Owner/Operator City,State,Zip: | FORT EDWARD, NY 12828 |
| Owner/Operator Telephone: | Not reported |
| Owner/Operator Telephone Ext: | Not reported |

**HUDSON RIVER PCBS (Continued)** **1000384273**

Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: GE HUDSON RIVER SEDIMENT REMEDIATION
Legal Status: Private
Date Became Current: 20070423
Date Ended Current: Not reported
Owner/Operator Address: 381 BROADWAY
Owner/Operator City,State,Zip: FORT EDWARD, NY 12828
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: GENERAL ELECTRIC CO
Legal Status: Private
Date Became Current: 20070402
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: GENERAL ELECTRIC COMPANY
Legal Status: Private
Date Became Current: 20070423
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: WCC LLC
Legal Status: Private
Date Became Current: 20070402
Date Ended Current: Not reported
Owner/Operator Address: 67 WILLOW GLEN
Owner/Operator City,State,Zip: MECHANICVILLE, NY 12188
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20100303
Handler Name: GE HUDSON RIVER SEDIMENT REMEDIATION PROCESSING AND TRANSPORTATION FACILITY
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported

**HUDSON RIVER PCBS (Continued)** **1000384273**

Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20120301
Handler Name: GE HUDSON RIVER SEDIMENT REMEDIATION PROCESSING AND TRANSPORTATION FACILITY
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20140303
Handler Name: GE HUDSON RIVER SEDIMENT REMEDIATION PROCESSING AND TRANSPORTATION FACILITY
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20180215
Handler Name: GE HUDSON RIVER SEDIMENT REMEDIATION PROCESSING AND TRANSPORTATION FACILITY
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20060101
Handler Name: HUDSON RIVER PCBS (ROGERS ISLAND) USEPA
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No

**HUDSON RIVER PCBS (Continued)** **1000384273**

Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20070101
Handler Name: HUDSON RIVER PCBS (ROGERS ISLAND) USEPA
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20080829
Handler Name: HUDSON RIVER PCBS (ROGERS ISLAND) SUPERFUND USEPA
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20010101
Handler Name: HUDSON RIVER PCBS (ROGERS ISLAND) USEPA
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56291
NAICS Description: Remediation Services

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

**HUDSON RIVER PCBS (Continued)** **1000384273**

SIte:

| | |
|---|---|
| Name: | HUDSON RIVER PCBS |
| Address: | NO STREET APPLICABLE |
| Address 2: | Not reported |
| City,State,Zip: | HUDSON RIVER, NY 12871-2834 |
| Event Code: | Not reported |
| Action Taken Date: | 02/01/2002 |
| EPA ID: | NYD980763841 |
| Action Name: | Record of Decision |
| Action ID: | 2 |
| Operable Unit: | 02 |
| Contaminated Media: | Sediment |
| Contact Name: | Not reported |
| Contact Telephone: | Not reported |
| Event: | Not reported |
| Federal Facility: | N |
| Fiscal Year: | 2002 |
| NPL Status: | Currently on the Final NPL |
| Superfund Alternative Agreement: | N |
| Latitude: | +43.110200 |
| Longitude: | -073.576500 |

Media:

| | |
|---|---|
| EPA ID: | NYD980763841 |
| Contaminated Media: | Sediment |
| Action ID: | 1 |
| Operable Unit: | 01 |
| Action Name: | Record of Decision |
| Action Taken Date: | 09/25/1984 |
| Event Code: | Not reported |
| Contact Name: | Not reported |
| Contact Telephone: | Not reported |
| Event: | Not reported |
| Federal Facility: | N |
| Fiscal Year: | 1984 |
| NPL Status: | Currently on the Final NPL |
| Superfund Alternative Agreement: | N |
| Latitude: | +43.110200 |
| Longitude: | -073.576500 |

| | |
|---|---|
| EPA ID: | NYD980763841 |
| Contaminated Media: | Sediment |
| Action ID: | 1 |
| Operable Unit: | 01 |
| Action Name: | Record of Decision |
| Action Taken Date: | 09/25/1984 |
| Event Code: | Not reported |
| Contact Name: | Not reported |
| Contact Telephone: | Not reported |
| Event: | Not reported |
| Federal Facility: | N |
| Fiscal Year: | 1984 |
| NPL Status: | Currently on the Final NPL |
| Superfund Alternative Agreement: | N |
| Latitude: | +43.110200 |
| Longitude: | -073.576500 |

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | |
|---|---|
| EPA ID: | NYD980763841 |
| Contaminated Media: | Sediment |
| Action ID: | 1 |
| Operable Unit: | 01 |
| Action Name: | Record of Decision |
| Action Taken Date: | 09/25/1984 |
| Event Code: | Not reported |
| Contact Name: | Not reported |
| Contact Telephone: | Not reported |
| Event: | Not reported |
| Federal Facility: | N |
| Fiscal Year: | 1984 |
| NPL Status: | Currently on the Final NPL |
| Superfund Alternative Agreement: | N |
| Latitude: | +43.110200 |
| Longitude: | -073.576500 |

| | |
|---|---|
| EPA ID: | NYD980763841 |
| Contaminated Media: | Sediment |
| Action ID: | 1 |
| Operable Unit: | 01 |
| Action Name: | Record of Decision |
| Action Taken Date: | 09/25/1984 |
| Event Code: | Not reported |
| Contact Name: | Not reported |
| Contact Telephone: | Not reported |
| Event: | Not reported |
| Federal Facility: | N |
| Fiscal Year: | 1984 |
| NPL Status: | Currently on the Final NPL |
| Superfund Alternative Agreement: | N |
| Latitude: | +43.110200 |
| Longitude: | -073.576500 |

| | |
|---|---|
| EPA ID: | NYD980763841 |
| Contaminated Media: | Sediment |
| Action ID: | 2 |
| Operable Unit: | 02 |
| Action Name: | Record of Decision |
| Action Taken Date: | 02/01/2002 |
| Event Code: | Not reported |
| Contact Name: | Not reported |
| Contact Telephone: | Not reported |
| Event: | Not reported |
| Federal Facility: | N |
| Fiscal Year: | 2002 |
| NPL Status: | Currently on the Final NPL |
| Superfund Alternative Agreement: | N |
| Latitude: | +43.110200 |
| Longitude: | -073.576500 |

| | |
|---|---|
| EPA ID: | NYD980763841 |
| Contaminated Media: | Sediment |
| Action ID: | 2 |
| Operable Unit: | 02 |
| Action Name: | Record of Decision |
| Action Taken Date: | 02/01/2002 |

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | |
|---|---|
| Event Code: | Not reported |
| Contact Name: | Not reported |
| Contact Telephone: | Not reported |
| Event: | Not reported |
| Federal Facility: | N |
| Fiscal Year: | 2002 |
| NPL Status: | Currently on the Final NPL |
| Superfund Alternative Agreement: | N |
| Latitude: | +43.110200 |
| Longitude: | -073.576500 |

| | |
|---|---|
| EPA ID: | NYD980763841 |
| Contaminated Media: | Sediment |
| Action ID: | 2 |
| Operable Unit: | 02 |
| Action Name: | Record of Decision |
| Action Taken Date: | 02/01/2002 |
| Event Code: | Not reported |
| Contact Name: | Not reported |
| Contact Telephone: | Not reported |
| Event: | Not reported |
| Federal Facility: | N |
| Fiscal Year: | 2002 |
| NPL Status: | Currently on the Final NPL |
| Superfund Alternative Agreement: | N |
| Latitude: | +43.110200 |
| Longitude: | -073.576500 |

| | |
|---|---|
| EPA ID: | NYD980763841 |
| Contaminated Media: | Surface Water |
| Action ID: | 2 |
| Operable Unit: | 02 |
| Action Name: | Record of Decision |
| Action Taken Date: | 02/01/2002 |
| Event Code: | Not reported |
| Contact Name: | Not reported |
| Contact Telephone: | Not reported |
| Event: | Not reported |
| Federal Facility: | N |
| Fiscal Year: | 2002 |
| NPL Status: | Currently on the Final NPL |
| Superfund Alternative Agreement: | N |
| Latitude: | +43.110200 |
| Longitude: | -073.576500 |

| | |
|---|---|
| EPA ID: | NYD980763841 |
| Contaminated Media: | Surface Water |
| Action ID: | 2 |
| Operable Unit: | 02 |
| Action Name: | Record of Decision |
| Action Taken Date: | 02/01/2002 |
| Event Code: | Not reported |
| Contact Name: | Not reported |
| Contact Telephone: | Not reported |
| Event: | Not reported |
| Federal Facility: | N |
| Fiscal Year: | 2002 |

**HUDSON RIVER PCBS (Continued)** **1000384273**

NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +43.110200
Longitude: -073.576500

EPA ID: NYD980763841
Contaminated Media: Sediment
Action ID: 2
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 02/01/2002
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: N
Fiscal Year: 2002
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +43.110200
Longitude: -073.576500

US INST CONTROLS:
Name: HUDSON RIVER PCBS
Address: NO STREET APPLICABLE
Address 2: Not reported
City,State,Zip: HUDSON RIVER, NY 12871-2834
EPA ID: NYD980763841
Action Name: Record of Decision
Action ID: 2
Operable Unit: 02
Actual Date: 02/01/2002
Contaminated Media: Surface Water
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: N
Fiscal Year: 2002
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +43.110200
Longitude: -073.576500

SPILLS:
Name: HUDSON RIVER
Address: HUDSON RIVER
City,State,Zip: OSSINING, NY
Spill Number/Closed Date: 0308107 / 2003-10-31
Facility ID: 0308107
Facility Type: ER
DER Facility ID: 278391
Site ID: 237813
DEC Region: 3
Spill Cause: Abandoned Drums

**HUDSON RIVER PCBS (Continued)** **1000384273**

| | |
|---|---|
| Spill Class: | D4 |
| SWIS: | 6000 |
| Spill Date: | 2003-10-31 |
| Investigator: | rxamato |
| Referred To: | Not reported |
| Reported to Dept: | 2003-10-31 |
| CID: | 297 |
| Water Affected: | HUDSON RIVER |
| Spill Source: | Unknown |
| Spill Notifier: | Federal Government |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2003-10-31 |
| Spill Record Last Update: | 2003-11-06 |
| Spiller Name: | Not reported |
| Spiller Company: | UNKNOWN |
| Spiller Address: | Not reported |
| Spiller Company: | 001 |
| Contact Name: | PETTY OFFFICER HAWKINS |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was SMITH 10/31/03: MEG hired by USCG to remove test and dispose. Container did not leak. |
| Remarks: | CALL TO NRC REPORTING A 55 GALLON DRUM OF UNKNOWN PETROLEUM FLOATING - USCG IS REPOSNDING TO THE SITE |

All Materials:

| | |
|---|---|
| Site ID: | 237813 |
| Operable Unit ID: | 874400 |
| Operable Unit: | 01 |
| Material ID: | 501630 |
| Material Code: | 0066A |
| Material Name: | unknown petroleum |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 55.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

ROD:

| | |
|---|---|
| Name: | HUDSON RIVER PCBS |
| Address: | No Street Applicable |
| City,State,Zip: | HUDSON RIVER, NY 12871 |
| EPA ID: | NYD980763841 |
| RG: | 2 |
| Site ID: | 202229 |
| Action: | GOVT Decision Document (ROD) |
| Operable Unit Number: | REMNANT DEPOSIT CAPPING |
| SEQ ID: | 1 |
| Action Completion: | 1984-09-25 00:00:00 |

**HUDSON RIVER PCBS (Continued)** **1000384273**

NPL Status: Final
Non NPL Status: Not reported

Name: HUDSON RIVER PCBS
Address: No Street Applicable
City,State,Zip: HUDSON RIVER, NY 12871
EPA ID: NYD980763841
RG: 2
Site ID: 202229
Action: GOVT Decision Document (ROD)
Operable Unit Number: REASSESSMENT RIVER
SEQ ID: 2
Action Completion: 2002-02-01 00:00:00
NPL Status: Final
Non NPL Status: Not reported

PRP:
PRP Name: DELAWARE AND HUDSON RAILWAY CO INC
GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC COMPANY
GENERAL ELECTRIC COMPANY
GOLUB PROPERTIES OF WATERVLIET INC
NEW YORK STATE CANAL CORPORATION
NIAGARA MOHAWK POWER COMPANY
TOWN OF HALFMOON NEW YORK
VILLAGE OF STILLWATER
WATER COMMISSIONERS OF THE TOWN OF WATERFORD

CONSENT:
EPA ID: NYD980763841
Site ID: 0284
Case Title: U.S.V. GENERAL ELECTRIC COMPANY (HUDSON RIVER) (EPA-SUPERFUND)
Court Num: 05-1270
District: New York, North
Entered Date: 11/02/06
Name: HUDSON RIVER PCBS
Name: HUDSON RIVER PCBS
Address: NO STREET APPLICABLE
City,State,Zip: HUDSON RIVER, NY 12801
County: WASHINGTON

EPA ID: NYD980763841
Site ID: 0284
Case Title: U.S.V. GENERAL ELECTRIC COMPANY (HUDSON RIVER) (EPA-SUPERFUND)
Court Num: 05-1270
District: New York, North
Entered Date: 11/02/06
Name: HUDSON RIVER PCBS

**HUDSON RIVER PCBS (Continued)** **1000384273**

Name: HUDSON RIVER PCBS
Address: NO STREET APPLICABLE
City,State,Zip: HUDSON RIVER, NY 12801
County: WASHINGTON

EPA ID: NYD980763841
Site ID: 0284
Case Title: U.S.V. GENERAL ELECTRIC COMPANY (HUDSON RIVER) (EPA-SUPERFUND)
Court Num: 05-1270
District: New York, North
Entered Date: 11/02/06
Name: HUDSON RIVER PCBS
Name: HUDSON RIVER PCBS
Address: NO STREET APPLICABLE
City,State,Zip: HUDSON RIVER, NY 12801
County: WASHINGTON

EPA ID: NYD980763841
Site ID: Not reported
Case Title: Not reported
Court Num: Not reported
District: Not reported
Entered Date: Not reported
Name: US V. GENERAL ELECTRIC COMPANY
Name: HUDSON RIVER PCBS
Address: NO STREET APPLICABLE
City,State,Zip: HUDSON RIVER, NY 12801
County: WASHINGTON

EPA ID: NYD980763841
Site ID: 0284
Case Title: U.S.V. GENERAL ELECTRIC COMPANY (HUDSON RIVER) (EPA-SUPERFUND)
Court Num: 05-1270
District: New York, North
Entered Date: 11/02/06
Name: HUDSON RIVER PCBS
Name: HUDSON RIVER PCBS
Address: NO STREET APPLICABLE
City,State,Zip: HUDSON RIVER, NY 12801
County: WASHINGTON

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**A4** **CON EDISON - EXCAVATION NONE** **RCRA NonGen / NLR** **1014396065**
**WSW** **RIVERDALE AVE AND CULVER STREE** **NY MANIFEST** **NYP004182457**
**< 1/8** **YONKERS, NY 10701** **NJ MANIFEST**
**0.012 mi.**
**61 ft.** **Site 4 of 11 in cluster A**

**Relative:** **Lower**
**Actual:** **47 ft.**

RCRA Listings:
Date Form Received by Agency: 20250115
Handler Name: Con Edison - Excavation None
Handler Address: Riverdale Ave And Culver Stree
Handler City,State,Zip: YONKERS, NY 10701
EPA ID: NYP004182457
Contact Name: FRANKLYN MURRAY
Contact Address: Not reported
Contact City,State,Zip: Not reported
Contact Telephone: 212-460-2808
Contact Fax: Not reported

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | | |
|---|---|---|
| Contact Email: | | MURRAYFR@CONED.COM |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Not reported |
| State District: | | Not reported |
| Mailing Address: | | Not reported |
| Mailing City,State,Zip: | | Not reported |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20250115 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

Biennial: List of Years
Year: 2009

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D008
Waste Description: Lead

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: CONSOLIDATED EDISON COMPANY OF NY, INC.
Legal Status: Private
Date Became Current: 20090630
Date Ended Current: Not reported
Owner/Operator Address: 4 IRVING PLACE
Owner/Operator City,State,Zip: NEW YORK, NY 10003
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: CONSOLIDATED EDISON COMPANY OF NY, INC.
Legal Status: Private
Date Became Current: 20090630
Date Ended Current: Not reported
Owner/Operator Address: 4 IRVING PLACE
Owner/Operator City,State,Zip: NEW YORK, NY 10003
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20100323
Handler Name: CON EDISON - EXCAVATION NONE
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20090630
Handler Name: CON EDISON
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20250115
Handler Name: CON EDISON - EXCAVATION NONE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 221122
NAICS Description: Electric Power Distribution

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:
EPA ID: NYP004170684
Country: USA
Name: Consolidated Edison
Address: RIVERDALE AVE & CULVER ST
Address 2: Not reported
City,State,Zip: YONKERS, NY 10701
Zip 4: Not reported
Location Address 1: RIVERDALE AVE AND CULVER STREE
Location Address 2: T
Location City,State,Zip: YONKERS, NY 10701
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Consolidated Edison
Mailing Contact: Franklyn Murray
Mailing Address 1: 4 IRVING PLACE RM 828
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124602808

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/30/2009 |
| Trans1 Recv Date: | 06/30/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/30/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004170684 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894075GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 56780 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/30/2009 |
| Trans1 Recv Date: | 06/30/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/30/2009 |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004170684 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894076GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 52720 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/30/2009 |
| Trans1 Recv Date: | 06/30/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/30/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004170684 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894077GBF |
| Import Indicator: | N |
| Export Indicator: | N |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 28820 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Dump truck |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/30/2009 |
| Trans1 Recv Date: | 06/30/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/30/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004170684 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894078GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 39840 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/30/2009 |
| Trans1 Recv Date: | 06/30/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/30/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004170684 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000181739GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Waste Code 6: | Not reported |
| Quantity: | 56640 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Dump truck |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/04/2009 |
| Trans1 Recv Date: | 06/04/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/04/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004170684 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000181750GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 29920 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Metal boxes, cartons, cases (including roll-offs) |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/04/2009 |
| Trans1 Recv Date: | 06/04/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/04/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004170684 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000181751GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 34920 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Metal boxes, cartons, cases (including roll-offs) |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/01/2009 |
| Trans1 Recv Date: | 06/02/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/02/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004170684 |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000181734GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 34600 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Metal boxes, cartons, cases (including roll-offs) |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/01/2009 |
| Trans1 Recv Date: | 06/01/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/01/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004170684 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000181747GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 51900 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Metal boxes, cartons, cases (including roll-offs) |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/01/2009 |
| Trans1 Recv Date: | 06/01/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/01/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004170684 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000181748GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 57060 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Metal boxes, cartons, cases (including roll-offs) |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | NJD003812047 |
| Generator Ship Date: | 06/01/2009 |
| Trans1 Recv Date: | 06/01/2009 |
| Trans2 Recv Date: | 06/01/2009 |
| TSD Site Recv Date: | 06/01/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004170684 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000181749GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 55600 |
| Units: | Pounds |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Number of Containers: | 1 |
| Container Type: | Metal boxes, cartons, cases (including roll-offs) |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |

Click this hyperlink while viewing on your computer to access
22 additional NY MANIFEST: record(s) in the EDR Site Report.

| | |
|---|---|
| EPA ID: | NYP004182457 |
| Country: | USA |
| Name: | Consolidated Edison |
| Address: | RIVERDALE AVE & CULVER ST |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10701 |
| Zip 4: | Not reported |
| Location Address 1: | RIVERDALE AVE AND CULVER STREE |
| Location Address 2: | T |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Consolidated Edison |
| Mailing Contact: | Franklyn Murray |
| Mailing Address 1: | 4 IRVING PLACE RM 828 |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124602808 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/07/2009 |
| Trans1 Recv Date: | 07/07/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/07/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004182457 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000410426GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 50960 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Metal boxes, cartons, cases (including roll-offs) |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/07/2009 |
| Trans1 Recv Date: | 07/07/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/07/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004182457 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894107GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 49660 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Dump truck |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/07/2009 |
| Trans1 Recv Date: | 07/07/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/07/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004182457 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894108GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 44740 |
| Units: | Pounds |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Number of Containers: | 1 |
| Container Type: | Dump truck |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/07/2009 |
| Trans1 Recv Date: | 07/07/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/07/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004182457 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894109GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 44220 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Dump truck |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Generator Ship Date: | 07/07/2009 |
| Trans1 Recv Date: | 07/07/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/07/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004182457 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894110GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 43800 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Dump truck |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/07/2009 |
| Trans1 Recv Date: | 07/07/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/07/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004182457 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894111GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 55140 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/01/2009 |
| Trans1 Recv Date: | 07/01/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/01/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004182457 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894079GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 55980 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Dump truck |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/01/2009 |
| Trans1 Recv Date: | 07/01/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/01/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004182457 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894080GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 64640 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Dump truck |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/01/2009 |
| Trans1 Recv Date: | 07/01/2009 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/01/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004182457 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894081GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 37080 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Dump truck |
| Handling Method: | Landfill |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

Specific Gravity: 1

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJD003812047
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 07/01/2009
Trans1 Recv Date: 07/01/2009
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/01/2009
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004182457
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD991291105
TSDF ID 2: Not reported
Manifest Tracking Number: 000894082GBF
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: Y
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H111
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 32580
Units: Pounds
Number of Containers: 1
Container Type: Dump truck
Handling Method: Landfill
Specific Gravity: 1

Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJD003812047
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 07/01/2009
Trans1 Recv Date: 07/01/2009
Trans2 Recv Date: Not reported

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| TSD Site Recv Date: | 07/01/2009 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004182457 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000894084GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | Y |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 48060 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Dump truck |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |

Click this hyperlink while viewing on your computer to access
12 additional NY MANIFEST: record(s) in the EDR Site Report.

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004182457 |
| Name: | CON EDISON - EXCAVATION NONE |
| Address: | RIVERDALE AVE & CULVER ST |
| City,State,Zip: | YONKERS, NY 10701 |
| County: | Not reported |
| Mailing Address: | 4 IRVING PL, RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | PATRICK HANLEY |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004182457 |
| Manifest Number: | 000894106GBF |
| Date Shipped: | 07/06/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 07/06/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 07/06/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H141 |
| Quantity: | 35 |
| Unit: | C |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

EPA ID: NYP004182457
Manifest Number: 000894103GBF
Date Shipped: 07/06/2009
TSDF EPA ID: NJD991291105
Transporter EPA ID: NJD003812047
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 9 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 07/06/2009
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 07/06/2009
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: N
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: Not reported
Waste Code: D008
Hand Code: H111
Quantity: 41540
Unit: P

EPA ID: NYP004182457
Manifest Number: 000894111GBF
Date Shipped: 07/07/2009
TSDF EPA ID: NJD991291105
Transporter EPA ID: NJD003812047
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 07/07/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 07/17/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 55140 |
| Unit: | P |

| | |
|---|---|
| EPA ID: | NYP004182457 |
| Manifest Number: | 000894100GBF |
| Date Shipped: | 07/02/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 07/02/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 07/02/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 45120 |
| Unit: | P |

| | |
|---|---|
| EPA ID: | NYP004182457 |
| Manifest Number: | 000894110GBF |
| Date Shipped: | 07/07/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 07/07/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 07/07/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 43800 |
| Unit: | P |

| | |
|---|---|
| EPA ID: | NYP004182457 |
| Manifest Number: | 000894079GBF |
| Date Shipped: | 07/01/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 07/01/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 07/01/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: N
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: Not reported
Waste Code: D008
Hand Code: H111
Quantity: 55980
Unit: P

EPA ID: NYP004182457
Manifest Number: 000894086GBF
Date Shipped: 07/02/2009
TSDF EPA ID: NJD991291105
Transporter EPA ID: NJD003812047
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 9 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 07/02/2009
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 07/02/2009
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: N
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: Not reported
Waste Code: D008
Hand Code: H111

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Quantity: | 50060 |
| Unit: | P |
| | |
| EPA ID: | NYP004182457 |
| Manifest Number: | 000410426GBF |
| Date Shipped: | 07/07/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 07/07/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 07/07/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 20960 |
| Unit: | P |
| | |
| EPA ID: | NYP004182457 |
| Manifest Number: | 000894101GBF |
| Date Shipped: | 07/06/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 07/06/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 07/06/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 49060 |
| Unit: | P |

| | |
|---|---|
| EPA ID: | NYP004182457 |
| Manifest Number: | 000410420GBF |
| Date Shipped: | 07/02/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Date Trans1 Transported Waste: | 07/02/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 07/02/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 35 |
| Unit: | T |

| | |
|---|---|
| EPA ID: | NYP004182457 |
| Manifest Number: | 000894108GBF |
| Date Shipped: | 07/07/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 07/07/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |

**CON EDISON - EXCAVATION NONE (Continued)** **1014396065**

| | |
|---|---|
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 07/07/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 44740 |
| Unit: | P |

Click this hyperlink while viewing on your computer to access
12 additional NJ MANIFEST: record(s) in the EDR Site Report.

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**A5**
**WSW**
**< 1/8**
**0.012 mi.**
**61 ft.**

**CON EDISON - TRENCH 1111** **RCRA NonGen / NLR** **1014395603**
**RIVERDALE AVE AND CULVER STREE** **NJ MANIFEST** **NYP004170684**
**YONKERS, NY 10701**

**Site 5 of 11 in cluster A**

**Relative:**
**Lower**

**Actual:**
**47 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20250221 |
| Handler Name: | Con Edison - Trench 1111 |
| Handler Address: | Riverdale Ave And Culver Stree |
| Handler City,State,Zip: | YONKERS, NY 10701 |
| EPA ID: | NYP004170684 |
| Contact Name: | FRANKLYN MURRAY |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-2808 |
| Contact Fax: | Not reported |
| Contact Email: | MURRAYFR@CONED.COM |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Not reported |
| State District: | Not reported |

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

| | | |
|---|---|---|
| Mailing Address: | | Not reported |
| Mailing City,State,Zip: | | Not reported |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20250221 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Biennial: List of Years
Year: 2009

Click Here for Biennial Reporting System Data:

Hazardous Waste Summary:
Waste Code: D008
Waste Description: Lead

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: CONSOLIDATED EDISON COMPANY OF NY, INC.
Legal Status: Private
Date Became Current: 20090601
Date Ended Current: Not reported
Owner/Operator Address: 4 IRVING PLACE
Owner/Operator City,State,Zip: NEW YORK, NY 10003
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: CONSOLIDATED EDISON COMPANY OF NY, INC.
Legal Status: Private
Date Became Current: 20090601
Date Ended Current: Not reported
Owner/Operator Address: 4 IRVING PLACE
Owner/Operator City,State,Zip: NEW YORK, NY 10003
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20100323
Handler Name: CON EDISON - TRENCH 1111
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20090601
Handler Name: CON EDISON
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20250221
Handler Name: CON EDISON - TRENCH 1111
Federal Waste Generator Description: Not a generator, verified

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

| | |
|---|---|
| State District Owner: | Not reported |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | No |
| Electronic Manifest Broker: | No |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Code: | 221122 |
| NAICS Description: | Electric Power Distribution |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004170684 |
| Name: | CON EDISON - TRENCH 1111 |
| Address: | RIVERDALE AVE & CULVER ST |
| City,State,Zip: | YONKERS, NY 10701 |
| County: | Not reported |
| Mailing Address: | 4 IRVING PL, RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | DAVID DUKE |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004170684 |
| Manifest Number: | 000181741GBF |
| Date Shipped: | 06/05/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

| | |
|---|---|
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 06/05/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 06/05/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 49840 |
| Unit: | P |

| | |
|---|---|
| EPA ID: | NYP004170684 |
| Manifest Number: | 000410427GBF |
| Date Shipped: | 06/04/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 06/04/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

| | |
|---|---|
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 06/04/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 15 |
| Unit: | C |

| | |
|---|---|
| EPA ID: | NYP004170684 |
| Manifest Number: | 000262964GBF |
| Date Shipped: | 06/04/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 06/04/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 06/04/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

| | |
|---|---|
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 55320 |
| Unit: | P |

| | |
|---|---|
| EPA ID: | NYP004170684 |
| Manifest Number: | 000181750GBF |
| Date Shipped: | 06/04/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 06/04/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 06/04/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

Reason Load Was Rejected: Not reported

Waste:
Manifest Year: Not reported
Waste Code: D008
Hand Code: H141
Quantity: 29920
Unit: P

EPA ID: NYP004170684
Manifest Number: 000181743GBF
Date Shipped: 06/05/2009
TSDF EPA ID: NJD991291105
Transporter EPA ID: NJD003812047
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 9 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 06/05/2009
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 06/05/2009
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: N
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: Not reported
Waste Code: D008
Hand Code: H111
Quantity: 48020
Unit: P

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

| | |
|---|---|
| EPA ID: | NYP004170684 |
| Manifest Number: | 000181663GBF |
| Date Shipped: | 06/03/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 06/03/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 06/03/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 47540 |
| Unit: | P |

| | |
|---|---|
| EPA ID: | NYP004170684 |
| Manifest Number: | 000181736GBF |
| Date Shipped: | 06/30/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

| | |
|---|---|
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 06/30/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 06/30/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 56640 |
| Unit: | P |

| | |
|---|---|
| EPA ID: | NYP004170684 |
| Manifest Number: | 000181666GBF |
| Date Shipped: | 06/03/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 06/03/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

| | |
|---|---|
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 06/03/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 53620 |
| Unit: | P |

| | |
|---|---|
| EPA ID: | NYP004170684 |
| Manifest Number: | 000894075GBF |
| Date Shipped: | 06/30/2009 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 06/30/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 06/30/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

| | |
|---|---|
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 56780 |
| Unit: | P |

| | |
|---|---|
| EPA ID: | NYP004170684 |
| Manifest Number: | 000181749GBF |
| Date Shipped: | 06/01/2009 |
| TSDF EPA ID: | NJD003812047 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 06/01/2009 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 06/01/2009 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: N
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: Not reported
Waste Code: D008
Hand Code: H141
Quantity: 55600
Unit: P

EPA ID: NYP004170684
Manifest Number: 000181742GBF
Date Shipped: 06/05/2009
TSDF EPA ID: NJD991291105
Transporter EPA ID: NJD003812047
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported
Transporter 8 EPA ID: Not reported
Transporter 9 EPA ID: Not reported
Transporter 10 EPA ID: Not reported
Date Trans1 Transported Waste: 06/05/2009
Date Trans2 Transported Waste: Not reported
Date Trans3 Transported Waste: Not reported
Date Trans4 Transported Waste: Not reported
Date Trans5 Transported Waste: Not reported
Date Trans6 Transported Waste: Not reported
Date Trans7 Transported Waste: Not reported
Date Trans8 Transported Waste: Not reported
Date Trans9 Transported Waste: Not reported
Date Trans10 Transported Waste: Not reported
Date TSDF Received Waste: 06/05/2009
TSDF EPA Facility Name: Not reported
QTY Units: Not reported
Transporter SEQ ID: Not reported
Transporter-1 Date: Not reported
Waste SEQ ID: Not reported
Waste Type Code 2: Not reported
Waste Type Code 3: Not reported
Waste Type Code 4: Not reported
Waste Type Code 5: Not reported
Waste Type Code 6: Not reported
Date Accepted: Not reported
Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: N
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: Not reported
Waste Code: D008
Hand Code: H111

**CON EDISON - TRENCH 1111 (Continued)** **1014395603**

Quantity: 51760
Unit: P

Click this hyperlink while viewing on your computer to access
22 additional NJ MANIFEST: record(s) in the EDR Site Report.

---

**A6** **LEWIS PROPERTY** **NY Spills** **S102151200**
**SSE** **10 CULVER STREET** **N/A**
**< 1/8** **YONKERS, NY**
**0.015 mi.**
**77 ft.** **Site 6 of 11 in cluster A**

**Relative:**
**Higher**

**Actual:**
**62 ft.**

SPILLS:

| | |
|---|---|
| Name: | LEWIS PROPERTY |
| Address: | 10 CULVER STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9101603 / 1991-05-15 |
| Facility ID: | 9101603 |
| Facility Type: | ER |
| DER Facility ID: | 193717 |
| Site ID: | 235186 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Not reported |
| SWIS: | 6018 |
| Spill Date: | 1991-04-26 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1991-05-09 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 1953-06-18 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1991-05-15 |
| Spill Record Last Update: | 1991-05-15 |
| Spiller Name: | Not reported |
| Spiller Company: | SAME APT. 7H |
| Spiller Address: | 180 HAWTHORNE AVE |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | 40.9192721 |
| Longitude: | -73.8999915 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | SMALL LEAK IN FILL PIPE NEXT DOOR NEIGHBOR USED SAND TO CLEAN UP ON 4/26/91 CALLED IN TO GET SPILL # ARLENE RESTO CHECKED OUT 5/9 |

All Materials:

| | |
|---|---|
| Site ID: | 235186 |
| Operable Unit ID: | 955182 |

**LEWIS PROPERTY (Continued)** **S102151200**

| | |
|---|---|
| Operable Unit: | 01 |
| Material ID: | 424169 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 2.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**A7** **NIRAG MANAGEMENT INC** **EDR Hist Auto** **1021541973**
**SSW** **380 RIVERDALE AVE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.018 mi.**
**96 ft.** **Site 7 of 11 in cluster A**

**Relative:** EDR Hist Auto
**Lower**

**Actual:**
**50 ft.**

| Year: | Name: | Type: |
|---|---|---|
| 1998 | NIRAG MANAGEMENT INC | Gasoline Service Stations |
| 1999 | NIRAG MANAGEMENT INC | Gasoline Service Stations |
| 2000 | NIRAG MANAGEMENT INC | Gasoline Service Stations |
| 2002 | NIRAJ MANAGEMENT INC | Gasoline Service Stations |
| 2011 | CITGO GAS STATION | Gasoline Service Stations |
| 2012 | RIVERDALE CONVENIENCE CORP | Gasoline Service Stations, NEC |
| 2013 | RIVERDALE CONVENIENCE CORP | Gasoline Service Stations, NEC |
| 2014 | RIVERDALE CONVENIENCE CORP | Gasoline Service Stations, NEC |

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**A8** **YONKERS FUEL INC.** **NY UST** **U004259547**
**SSW** **380 RIVERDALE AVENUE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.018 mi.**
**96 ft.** **Site 8 of 11 in cluster A**

**Relative:** WESTCHESTER CO. UST:
**Lower**

**Actual:**
**50 ft.**

| | |
|---|---|
| Name: | YONKERS FUEL INC. |
| Address: | 380 RIVERDALE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-800744 / Active |
| Operator Name: | Suleyman Issi |
| Owner Name: | 380 Riverdale Realty LLC |
| Owner Street: | 2188 Kirby Lane |
| Owner Address2: | Not reported |
| Owner City: | Syosset |
| Owner State: | NY |
| Owner Zipcode: | 11791 |
| GDS Number: | 3551800879 |
| | |
| Tank Number: | 001 |
| Status: | 1. In-Service |
| Capacity: | 6000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 5. In-Tank System (auto tank gauge) |

**YONKERS FUEL INC. (Continued)** **U004259547**

| | |
|---|---|
| Date Installation: | 07/01/2003 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 4. Fiberglass coated steel |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 4. Fiberglass |
| Tank Secondary Containment: | 4. Double-Walled (underground only) |
| Piping Location: | 2. Underground/on Ground |
| Piping Type: | 6. Fiberglass Reinforced Plastic (FRP) |
| Piping External Protection: | 4. Fiberglass |
| Overfill Prevention: | 2. High Level Alarm |
| Piping Secondary Containment: | 4. Double-Walled (underground only) |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 1. Submersible |

| | |
|---|---|
| Tank Number: | 002 |
| Status: | 1. In-Service |
| Capacity: | 6000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 5. In-Tank System (auto tank gauge) |
| Date Installation: | 07/01/2003 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 4. Fiberglass coated steel |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 4. Fiberglass |
| Tank Secondary Containment: | 4. Double-Walled (underground only) |
| Piping Location: | 2. Underground/on Ground |
| Piping Type: | 6. Fiberglass Reinforced Plastic (FRP) |
| Piping External Protection: | 4. Fiberglass |
| Overfill Prevention: | 2. High Level Alarm |
| Piping Secondary Containment: | 4. Double-Walled (underground only) |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 1. Submersible |

| | |
|---|---|
| Tank Number: | 003 |
| Status: | 1. In-Service |
| Capacity: | 6000 |
| Product Stored: | 0008. Diesel |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 5. In-Tank System (auto tank gauge) |
| Date Installation: | 07/01/2003 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 4. Fiberglass coated steel |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 4. Fiberglass |
| Tank Secondary Containment: | 4. Double-Walled (underground only) |
| Piping Location: | 2. Underground/on Ground |
| Piping Type: | Not reported |
| Piping External Protection: | 4. Fiberglass |
| Overfill Prevention: | 2. High Level Alarm |
| Piping Secondary Containment: | 4. Double-Walled (underground only) |
| Spill Prevention: | 1. Catch Basin |

**YONKERS FUEL INC. (Continued)** **U004259547**

| | |
|---|---|
| Dispenser: | 1. Submersible |
| Tank Number: | 1 |
| Status: | 3. Closed - Removed |
| Capacity: | 6000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 07/01/1973 |
| Date Perm Closure: | 05/15/2003 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | Not reported |
| Piping Location: | 0. No Pipiing |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |
| Tank Number: | 2 |
| Status: | 3. Closed - Removed |
| Capacity: | 6000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 07/01/1973 |
| Date Perm Closure: | 05/15/2003 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | Not reported |
| Piping Location: | 0. No Pipiing |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |
| Tank Number: | 3 |
| Status: | 3. Closed - Removed |
| Capacity: | 6000 |
| Product Stored: | 0008. Diesel |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 07/01/1973 |
| Date Perm Closure: | 05/15/2003 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |

**YONKERS FUEL INC. (Continued)** **U004259547**

| | |
|---|---|
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | Not reported |
| Piping Location: | 0. No Pipiing |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

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**A9** **CITGO STATION** **NY Spills** **S105996067**
**SSW** **380 RIVERDALE AVE** **N/A**
**< 1/8** **YONKERS, NY**
**0.018 mi.**
**96 ft.** **Site 9 of 11 in cluster A**

**Relative:** SPILLS:
**Lower**

**Actual:**
**50 ft.**

| | |
|---|---|
| Name: | CITGO STATION |
| Address: | 380 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0202712 / Not Reported |
| Facility ID: | 0202712 |
| Facility Type: | ER |
| DER Facility ID: | 321739 |
| Site ID: | 113333 |
| DEC Region: | 3 |
| Spill Cause: | Unknown |
| Spill Class: | A3 |
| SWIS: | 6018 |
| Spill Date: | 2002-06-13 |
| Investigator: | TDGHIOSA |
| Referred To: | WESTCHESTER CNTY HEALTH D |
| Reported to Dept: | 2002-06-13 |
| CID: | 322 |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Local Agency |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | True |
| Remediation Phase: | 4 |
| Date Entered In Computer: | 2002-06-13 |
| Spill Record Last Update: | 2024-07-17 |
| Spiller Name: | MR SINGH |
| Spiller Company: | Not reported |
| Spiller Address: | 380 RIVERDALE |
| Spiller Company: | 001 |
| Contact Name: | MR SINGH |
| Latitude: | 40.9191672 |
| Longitude: | -73.9012639 |
| DEC Memo: | 06/13/02 CARLOS TORRES (WCHD) ON SCENE. REGULAR TANK FAILED TEST. ODOR/VAPORS IN SEWERS ONGOING PROBLEM. PREVIOUSLY REPORTED AS SPILLS 02-02336 & 02-02570 jod WCHD JACKSON REFERRED CASE TO JOHN O'MARA. In response to the DEC TechLaw review letter of Feb. 2008 the |

**CITGO STATION (Continued)** **S105996067**

consultant ENSR has contacted
DEC by phone. It was indicated that MWs have been installed and a report and RAP will be
forthcoming. PJD 4/08 3-12-15 responded to an email inquiry from consulttant and morgtage comp. No
work has occurred in years, status unknown. RDB 3-14-15 response from Consultant that work has been
done and submitted(?); I then requested a copy of the work. The only activity on the subject
property has been groundwater monitoring. Copies of the recent testing has been forwarded to the
DEC at the time of testing. A proposal was submitted to the DEC to excavate an area between the
island/ tank farm and Rosedale Ave. not a partically large area but the only open area that is
contaminated that can be accessed. RDB 3-15-15 consult, submitted one round of gw sampling from
10-14; numbers are high; I again requested a summary of the work completed. RDB 3-16-15, The DEC
does not have the 2 or three sets of data that you report submitting to Mr. O Mara. Could I please
have a comprehensive summary of work conducted and the results of the work for the last five years?
RDB 06-07-18 Stopped by site to ask for owner information. New Owner is Manoj Narang (516)
921-7190. Current operator is Suleyman Issi (914) 423-8896. Operator said they are not doing a site
investigation. Left voicemail for the owner to call me. BTR 06-11-18 Site Investigation Work Plan
from August 2014 submitted by Volumetric Techniques. Update from consultant Attached are the
following documents: Correspondance with John o'Mera, the most recent groundwater testing - Oct of
14 and a building permit which was obtained to begin abatement activities. As I had mentioned, Mr.
O'Mera never got back to us regarding the work plan previously submitted. BTR 1/25/19 NOV required,
enforcement necessary. TJP 1/30/19 NOV/STIP sent out to operator and facility owner, updates to
come. TJP 3-7-19 Received a voicemail and an email of an investigative workplan from Sandy at
Volumetric Techniques regarding the site. I spoke with Sandy on the phone an informed him that a
sign STIP was never received by the department, a signed STIP must be received before any remedial
activity. Email is in D2. TJP 3/21/19 Signed STIP and investigative workplan has been received by
the department, the workplan has been denied due to incompletion. TJP 3/27/19 Revised workplan has
been received TJP 04-09-19 Work plan was rejected and Volumetric Techniques was notified. BTR
09-09-19 Spoke with site owner Manoj. He indicated that the consultant passed away and he is in the
process of hiring a new consultant. BTR 09-10-19 Email to Manoj that a RIWP is still required. BTR
09-25-19 RIWP was submitted by Berninger Environmental. work plan is on D2. BTR 10-21-19 Update

**CITGO STATION (Continued)** **S105996067**

from J.Halpin We are looking to mobilize to perform this work October 31 and Nov 1 Thursday/Friday
. BTR 12-5-19 Update from J.Halpin: the report will be submitted Friday 12/6. BTR 12-11-19
Berninger Environmental submitted RIR. BTR 12-18-19 Email to Berninger Environmental: there is
significant contamination on site and RAP must be submitted. Also complete quarterly sampling by
January 15, 2020. BTR 01-15-20 Berninger returned to complete drilling to 23 feet bgs and collect
groundwater samples. BTR 01-17-20 Update from J. Halpin: RAP to be sent today via FTS. BTR 02-27-20
RIR addendum submitted to the Department. BTR 05-05-20 RIR addendum and RAP have been reviewed. The
RAP plan to implement AS/SVE is approved. Provide a schedule update by May 27. BTR 07-17-20
Berninger has sent the permit app to construct AS/SVE system. BTR 08-12-20 Rec'd 3QMR July 2020.
BTR 09-28-20 Update from Berninger: Checking on the status of our permit app. BTR 10-05-20
Berninger will check on their application status again. BTR 10-15-20 WCHD is still reviewing the
application. BTR 03-09-21 Update from Berninger: To date we completed 2 VEFR events recovering
approximately 600 gallons of gas/water mix. We started on feb 17th because of the holiday on the
15th as I couldn t get a truck Also performed an event on March 3. Anticipating an event for the
17th as well. The revised WCDOH permit is currently under review. BTR 06-25-21 Reviewed 2QMR April
2021. The total VOC concentrations are still above 10,000 ppb in MW2 and MW5, and MTBE is above
100ppb. VEFR events continued with 50 gallons vac'd from MW2 and 840 gallons vac'd from MW5 in
April. The AS/SVE permit was rejected again in March 2021. No resubmittal has been made. BTR
08-10-21 Received QMR. VEFR events continued in July. VOC concentrations are still high in MW-5 and
MW-2. No update on AS/SVE system. BTR 11-11-21 Received 4 QMR 21. Total VOCs are up 78% since
beginning VEFR events. BTR 11-12-21 Berninger indicated they are working on the AS/SVE permit app.
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MW-2 and MW-5 this Quarter. See report in DecDocs. TG 05/12/23 Received a QMR dated April 30, 2023
from Berninger Environmental. See report in DecDocs. VOC very high in MW-2 and 5X higher in MW-5.
TG 07/17/24 Emailed Alicia Baston at Champion Environmental Services advising her that a current
report is long overdue. TG

Remarks: health dept responded to calls from homeowners reporting an odor of gas - spill located in sewers from the gas station

All Materials:
Site ID: 113333
Operable Unit ID: 855815
Operable Unit: 01

**CITGO STATION (Continued)** **S105996067**

| | |
|---|---|
| Material ID: | 520555 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | CITGO STATION |
| Address: | 380 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0202712 / Not Reported |
| Facility ID: | 0202712 |
| Facility Type: | ER |
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| Site ID: | 113333 |
| DEC Region: | 3 |
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| Spill Class: | A3 |
| SWIS: | 6018 |
| Spill Date: | 2002-06-13 |
| Investigator: | TDGHIOSA |
| Referred To: | WESTCHESTER CNTY HEALTH D |
| Reported to Dept: | 2002-06-13 |
| CID: | 322 |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Local Agency |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | True |
| Remediation Phase: | 4 |
| Date Entered In Computer: | 2002-06-13 |
| Spill Record Last Update: | 2024-07-17 |
| Spiller Name: | MANOJ NARANG |
| Spiller Company: | VM PETRO HOLDING |
| Spiller Address: | 2188 KIRBY LANE |
| Spiller Company: | 999 |
| Contact Name: | MR SINGH |
| Latitude: | 40.9191672 |
| Longitude: | -73.9012639 |
| DEC Memo: | 06/13/02 CARLOS TORRES (WCHD) ON SCENE. REGULAR TANK FAILED TEST. ODOR/VAPORS IN SEWERS ONGOING PROBLEM. PREVIOUSLY REPORTED AS SPILLS 02-02336 & 02-02570 jod WCHD JACKSON REFERRED CASE TO JOHN O'MARA. In response to the DEC TechLaw review letter of Feb. 2008 the consultant ENSR has contacted DEC by phone. It was indicated that MWs have been installed and a report and RAP will be forthcoming. PJD 4/08 3-12-15 responded to an email inquiry from consulttant and morgtage comp. No work has occurred in years, status unknown. RDB 3-14-15 response from |

**CITGO STATION (Continued)** **S105996067**

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**CITGO STATION (Continued)** **S105996067**

significant contamination on site and RAP must be submitted. Also complete quarterly sampling by
January 15, 2020. BTR 01-15-20 Berninger returned to complete drilling to 23 feet bgs and collect
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from Berninger Environmental. See report in DecDocs. VOC very high in MW-2 and 5X higher in MW-5.
TG 07/17/24 Emailed Alicia Baston at Champion Environmental Services advising her that a current
report is long overdue. TG

Remarks: health dept responded to calls from homeowners reporting an odor of gas - spill located in sewers from the gas station

All Materials:

| | |
|---|---|
| Site ID: | 113333 |
| Operable Unit ID: | 855815 |
| Operable Unit: | 01 |
| Material ID: | 520555 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |

**CITGO STATION (Continued)** **S105996067**

| | |
|---|---|
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | CITGO SERVICE STATION |
| Address: | 380 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0608110 / Not Reported |
| Facility ID: | 0608110 |
| Facility Type: | ER |
| DER Facility ID: | 321739 |
| Site ID: | 371999 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2006-10-16 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2006-10-16 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 4 |
| Date Entered In Computer: | 2006-10-16 |
| Spill Record Last Update: | 2024-07-17 |
| Spiller Name: | RANJOR SINGH |
| Spiller Company: | CITGO SERVICE STATION |
| Spiller Address: | 380 RIVERDALE AVE |
| Spiller Company: | 999 |
| Contact Name: | SULEYMAN ISSI |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | Could be from old spill, however it looks like fresh product. Have sent samples to lab. Will report to John O'Mara. Based on MIG report waiting for Tank Test results JO'M 11/05/09 John O'Mara Will Check JO'M 3-12-15 responded to inquiry from mortgage banker and consultant; no new information; unknown site status; hoping they will provide information- rdb 3-14-15 response from Consultant that work has been done and submitted(?); I then requested a copy of the work. The only activity on the subject property has been groundwater monitoring. Copies of the recent testing has been forwarded to the DEC at the time of testing. A proposal was submitted to the DEC to excavate an area between the island/ tank farm and Rosedale Ave. not a partically large area but the only open area that is contaminated that can be accessed. RDB 3-15-15 consult, |

**CITGO STATION (Continued)** **S105996067**

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**CITGO STATION (Continued)** **S105996067**

15th as I couldn t get a truck Also performed an event on March 3. Anticipating an event for the
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2021. The total VOC concentrations are still above 10,000 ppb in MW2 and MW5, and MTBE is above
100ppb. VEFR events continued with 50 gallons vac'd from MW2 and 840 gallons vac'd from MW5 in
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Environmental Services advising her that a current report is long overdue. TG

Remarks: DURING GEO PROBE FOUND CONTAMINATED SOIL;

All Materials:

| | |
|---|---|
| Site ID: | 371999 |
| Operable Unit ID: | 1129746 |
| Operable Unit: | 01 |
| Material ID: | 2119411 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | CITGO SERVICE STATION |
| Address: | 380 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0608110 / Not Reported |
| Facility ID: | 0608110 |
| Facility Type: | ER |
| DER Facility ID: | 321739 |
| Site ID: | 371999 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2006-10-16 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2006-10-16 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |

**CITGO STATION (Continued)** **S105996067**

| | |
|---|---|
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 4 |
| Date Entered In Computer: | 2006-10-16 |
| Spill Record Last Update: | 2024-07-17 |
| Spiller Name: | Sal ISSI |
| Spiller Company: | Conoco Service Station |
| Spiller Address: | 380 Riverdale Ave |
| Spiller Company: | 999 |
| Contact Name: | SULEYMAN ISSI |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | Could be from old spill, however it looks like fresh product. Have sent samples to lab. Will report to John O'Mara. Based on MIG report waiting for Tank Test results JO'M 11/05/09 John O'Mara Will Check JO'M 3-12-15 responded to inquiry from mortgage banker and consultant; no new information; unknown site status; hoping they will provide information- rdb 3-14-15 response from Consultant that work has been done and submitted(?); I then requested a copy of the work. The only activity on the subject property has been groundwater monitoring. Copies of the recent testing has been forwarded to the DEC at the time of testing. A proposal was submitted to the DEC to excavate an area between the island/ tank farm and Rosedale Ave. not a partically large area but the only open area that is contaminated that can be accessed. RDB 3-15-15 consult, submitted one round of gw sampling from 10-14; numbers are high; I again requested a summary of the work completed. RDB 3-16-15, The DEC does not have the 2 or three sets of data that you report submitting to Mr. O Mara. Could I please have a comprehensive summary of work conducted and the results of the work for the last five years? RDB 06-07-18 Stopped by site to ask for owner information. New Owner is Manoj Narang (516) 921-7190. Current operator is Suleyman Issi (914) 423-8896. Operator said they are not doing a site investigation. Left voicemail for the owner to call me. BTR 1/25/19 NOV required, enforcement necessary. TJP 1/30/19 NOV/STIP sent out to operator and facility owner, updates to come. TJP 3-7-19 Received a voicemail and an email of an investigative workplan from Sandy at Volumetric Techniques regarding the site. I spoke with Sandy on the phone an informed him that a sign STIP was never received by the department, a signed STIP must be received before any remedial activity. Email is in D2. TJP 3/21/19 Signed STIP and investigative workplan has been received by the department, the workplan has been denied due to incompletion. TJP |

**CITGO STATION (Continued)** **S105996067**

3/27/19 Revised workplan has
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Remarks: DURING GEO PROBE FOUND CONTAMINATED SOIL;

**CITGO STATION (Continued)** **S105996067**

All Materials:

| | |
|---|---|
| Site ID: | 371999 |
| Operable Unit ID: | 1129746 |
| Operable Unit: | 01 |
| Material ID: | 2119411 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | CITGO SERVICE STATION |
| Address: | 380 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0608110 / Not Reported |
| Facility ID: | 0608110 |
| Facility Type: | ER |
| DER Facility ID: | 321739 |
| Site ID: | 371999 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2006-10-16 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2006-10-16 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 4 |
| Date Entered In Computer: | 2006-10-16 |
| Spill Record Last Update: | 2024-07-17 |
| Spiller Name: | MANOJ NARANG |
| Spiller Company: | VM Petro Holding Inc. |
| Spiller Address: | 2188 KIRBY LANE |
| Spiller Company: | 999 |
| Contact Name: | SULEYMAN ISSI |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | Could be from old spill, however it looks like fresh product. Have sent samples to lab. Will report to John O'Mara. Based on MIG report waiting for Tank Test results JO'M 11/05/09 John O'Mara Will Check JO'M 3-12-15 responded to inquiry from mortgage banker and consultant; no new information; unknown site status; hoping they will provide information- rdb 3-14-15 |

**CITGO STATION (Continued)** **S105996067**

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**CITGO STATION (Continued)** **S105996067**

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| | |
|---|---|
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| Operable Unit: | 01 |
| Material ID: | 2119411 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | CITGO STATION |
| Address: | 380 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0110501 / 2002-02-01 |
| Facility ID: | 0110501 |
| Facility Type: | ER |
| DER Facility ID: | 321739 |
| Site ID: | 251974 |
| DEC Region: | 3 |

**CITGO STATION (Continued)** **S105996067**

| | |
|---|---|
| Spill Cause: | Unknown |
| Spill Class: | B2 |
| SWIS: | 6018 |
| Spill Date: | 2002-02-01 |
| Investigator: | jbodee |
| Referred To: | WCDOH |
| Reported to Dept: | 2002-02-01 |
| CID: | 322 |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Local Agency |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2002-02-01 |
| Spill Record Last Update: | 2019-12-13 |
| Spiller Name: | Not reported |
| Spiller Company: | Citgo |
| Spiller Address: | UNK |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Latitude: | 40.9188162 |
| Longitude: | -73.9013053 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was MCCABE/WCDOH |
| Remarks: | trasmission fluid found in a drain on the property - the health dept. has placed some pads down - |

All Materials:

| | |
|---|---|
| Site ID: | 251974 |
| Operable Unit ID: | 847579 |
| Operable Unit: | 01 |
| Material ID: | 528124 |
| Material Code: | 0021 |
| Material Name: | transmission fluid |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 1.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**A10** **CITGO STATION** **UST FINDER RELEASE** **1029074103**
**SSW** **380 RIVERDALE AVE** **N/A**
**< 1/8** **YONKERS, NY 0**
**0.018 mi.**
**96 ft.** **Site 10 of 11 in cluster A**

**Relative:** UST FINDER RELEASE:
**Lower**

| | |
|---|---|
| **Actual:** Object ID: | 258834 |
| **50 ft.** Facility ID: | NY321739 |
| Lust ID: | NY202712 |
| Name: | CITGO STATION |
| Address: | 380 RIVERDALE AVE |

**CITGO STATION (Continued)** **1029074103**

| | |
|---|---|
| City,State,Zip: | YONKERS, NY 0 |
| Address Match Type: | Not reported |
| Reported Date: | 2002/06/13 15:59:59+00 |
| Status: | Open |
| Substance: | Not reported |
| Population within 1500ft: | 10542 |
| Domestic Wells within 1500ft: | 0 |
| Land Use: | Developed, High Intensity |
| Within SPA: | No |
| SPA PWS Facility ID: | Not reported |
| SPA Water Type: | Not reported |
| SPA Facility Type: | Not reported |
| SPA HUC12: | Not reported |
| Within WHPA: | No |
| WHPA PWS Facility ID: | Not reported |
| WHPA Water Type: | Not reported |
| WHPA Facility Type: | Not reported |
| WHPA HUC12: | Not reported |
| Within 100yr Floodplain: | No |
| Tribe: | Not reported |
| EPA Region: | 2 |
| NFA Letter 1: | Not reported |
| NFA Letter 2: | Not reported |
| NFA Letter 3: | Not reported |
| NFA Letter 4: | Not reported |
| Closed With Residual Contaminate: | Not reported |
| Coordinate Source: | State |
| X Coord: | -73.90126 |
| Y Coord: | 40.9191700000001 |
| Latitude: | 40.91917 |
| Longitude: | -73.9012599999999 |

---

**A11** **CONOCO STATION** **NY Spills** **S122481028**
**SSW** **380 RIVERDALE AVE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.018 mi.**
**96 ft.** **Site 11 of 11 in cluster A**

**Relative:** **Lower**
**Actual:** **50 ft.**

SPILLS:

| | |
|---|---|
| Name: | CONOCO STATION |
| Address: | 380 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 |
| Spill Number/Closed Date: | 1804210 / Not Reported |
| Facility ID: | 1804210 |
| Facility Type: | ER |
| DER Facility ID: | 526890 |
| Site ID: | 573876 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2018-07-18 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2018-07-19 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |

**CONOCO STATION (Continued)** **S122481028**

| | |
|---|---|
| Spill Notifier: | DEC |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | Not reported |
| Remediation Phase: | 1 |
| Date Entered In Computer: | 2018-07-19 |
| Spill Record Last Update: | 2023-09-29 |
| Spiller Name: | SAL ISSI |
| Spiller Company: | Conoco |
| Spiller Address: | 380 Riverdale Avenue |
| Spiller Company: | 999 |
| Contact Name: | SULEYMAN ISSI |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 07-19-18 During PBS inspection the dispenser had a petroleum odor and a faulty meter that was weeping fuel onto the gasoline dispenser line. Operator is going to replace all the dispensers and will take the faulty meter out of service. BTR 1/25/19 NOV required, enforcement necessary. TJP 1/30/19 NOV/STIP sent out to operator and facility owner, updates to come. TJP 2/7/19 Spoke with the attorney of the facility owner who informed me that they are planning on returning a signed STIP and RIWP in the near future. TJP 3-7-19 Received a voicemail and an email of an investigative workplan from Sandy at Volumetric Techniques regarding the site. I spoke with Sandy on the phone an informed him that a sign STIP was never received by the department, a signed STIP must be received before any remedial activity. Email is in D2. TJP 3/21/19 Signed STIP and investigative workplan has been received by the department, the workplan has been denied due to incompletion. TJP 3/27/19 Revised workplan has been received TJP 04-09-19 Work plan was rejected and Volumetric Techniques was notified. BTR 09-09-19 Spoke with site owner Manoj. He indicated that the consultant passed away and he is in the process of hiring a new consultant. BTR 09-10-19 Email to Manoj that a RIWP is still required. BTR 09-25-19 RIWP was submitted by Berninger Environmental. work plan is on D2. BTR 10/7/2019 Updated RIWP received and approved, Berninger to submit a work schedule by October 21st, 2019. TJP 10-21-19 Update from J.Halpin We are looking to mobilize to perform this work October 31 and Nov 1 Thursday/Friday . BTR 11-12-19 Phone call with Justin. All the soil samples must be analyzed. They got refusal on the boring east of the tank field. Location 3 and 4 were really high and the PID maxed out. Other borings across the property had zero on the PID but those samples must be analyzed regardless. BTR 12-5-19 Update from J.Halpin: the report will be submitted Friday 12/6. BTR 12-11-19 Berninger Environmental submitted RIR. BTR |

**CONOCO STATION (Continued)** **S122481028**

12-18-19 Email to Berninger
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11-10-20 Update from Berninger. They are resubmitting their application. BTR 03-09-21 Update from
Berninger: To date we completed 2 VEFR events recovering approximately 600 gallons of gas/water
mix. We started on feb 17th because of the holiday on the 15th as I couldn t get a truck Also
performed an event on March 3. Anticipating an event for the 17th as well. The revised WCDOH permit
is currently under review. BTR 06-25-21 Reviewed 2QMR April 2021. The total VOC concentrations are
still above 10,000 ppb in MW2 and MW5, and MTBE is above 100ppb. VEFR events continued with 50
gallons vac'd from MW2 and 840 gallons vac'd from MW5 in April. The AS/SVE permit was rejected
again in March 2021. No resubmittal has been made. BTR 08-10-21 Received QMR. VEFR events continued
in July. VOC concentrations are still high in MW-5 and MW-2. No update on AS/SVE system. BTR
11-12-21 Received update from Berninger: We still have to reply to a round of comments. Part of the
delay I believe other than obviously COVID was the fact that I waited 8 months for comments because
WC sent them to the wrong email address. I working with our PE to get it done ASAP BTR 01/11/22
Justin Halpin jhalpin@wrses.com emailed Beynan Ranson regarding the WCHD air permit for the AS/SVE
system. Justin wrote, Just keeping you posted: Aiming to have revised application out to WCDOH this
week. TG 02/03/22 Alicia Patti from Berninger Environmental submitted a QMR dated 10/15/21. She
expects to submit January 2022 report in a few weeks. 02/06/22 Received QMR dated Jan 17,2022 from
Berninger Environmental. Total VOC declined in MW-2 and MW-5 this Quarter. See report in DecDocs.
TG 05/12/23 Received a QMR dated April 30, 2023 from Berninger Environmental. See report in
DecDocs. VOC very high in MW-2 and 5X higher in MW-5. TG

Remarks: Upon inspection the meter under dispenser 3/4 was weeping gasoline

**CONOCO STATION (Continued)** **S122481028**

onto the piping.

All Materials:

| | |
|---|---|
| Site ID: | 573876 |
| Operable Unit ID: | 1321683 |
| Operable Unit: | 01 |
| Material ID: | 2329819 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**B12** **RIVERDALE AUTO SERVICE CO INC** **EDR Hist Auto** **1020438096**
**West** **377 RIVERDALE AVE** **N/A**
**< 1/8** **YONKERS, NY 10702**
**0.019 mi.**
**101 ft.** **Site 1 of 5 in cluster B**

**Relative:** EDR Hist Auto
**Lower**

**Actual:** **47 ft.**

| Year: | Name: | Type: |
|---|---|---|
| 1969 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1970 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1971 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1972 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1973 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1974 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1975 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1976 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1977 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1978 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1979 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1980 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1982 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |
| 1983 | RIVERDALE AUTO SERVICE CO INC | Gasoline Service Stations |

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**C13** **DEVONSHIRE LANE SERVICE INC** **EDR Hist Auto** **1020796842**
**SSE** **390 RIVERDALE AVENUE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.033 mi.**
**175 ft.** **Site 1 of 5 in cluster C**

**Relative:** EDR Hist Auto
**Higher**

**Actual:** **64 ft.**

| Year: | Name: | Type: |
|---|---|---|
| 1969 | DEVONSHIRE LANE SERVICE INC | Gasoline Service Stations |
| 1970 | DEVONSHIRE LANE SERVICE INC | Gasoline Service Stations |
| 1972 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1973 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1974 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1975 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1976 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |

**DEVONSHIRE LANE SERVICE INC (Continued)** **1020796842**

| | | |
|---|---|---|
| 1977 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1978 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1979 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1980 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1982 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1983 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1985 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1986 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1987 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1988 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores |
| 1989 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 1990 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 1991 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 1992 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 1993 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 1994 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 1995 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 1996 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 1997 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 1998 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 1999 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2000 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2001 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2002 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2002 | A-ONE TRANSMISSION PARTS | Automotive Transmission Repair Shops |
| 2003 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2004 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2005 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2006 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2007 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2008 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2009 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2010 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2010 | DEVONSHIRE 2010 INC | General Automotive Repair Shops |
| 2011 | DEVONSHIRE 2010 INC | General Automotive Repair Shops |
| 2011 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2012 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2012 | DEVONSHIRE 2010 INC | General Automotive Repair Shops |
| 2013 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |
| 2013 | DEVONSHIRE 2010 INC | General Automotive Repair Shops |
| 2014 | DEVONSHIRE 2010 INC | General Automotive Repair Shops |
| 2014 | DEVONSHIRE LANE SERVICE INC | Auto And Home Supply Stores, NEC |

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**C14** **SAFEGUARD RIVERDALE** **NY AST** **S110539750**
**SSE** **390 RIVERDALE AVENUE** **NY Spills** **N/A**
**< 1/8** **YONKERS, NY 10705** **NY SPDES**
**0.033 mi.**
**175 ft.** **Site 2 of 5 in cluster C**

**Relative:**
**Higher**

**Actual:**
**64 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | DEVONSHIRE 2010 INC. |
| Address: | 390 RIVERDALE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-138045 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Devonshire 2010 Inc. |
| Owner Name: | Devonshire 2010 Inc. |

**SAFEGUARD RIVERDALE (Continued)** **S110539750**

| | |
|---|---|
| Owner Street: | 390 Riverdale Avenue |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10705 |
| | |
| Tank Number: | 10 |
| Status: | 1. In-Service |
| Date Installation: | 01/01/2004 |
| Capacity: | 1000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 2. Aboveground (contact w/ impervious barrier) |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 9. Modified double-walled (aboveground only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 1. Diking (aboveground only) |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 3. Gravity |
| | |
| Tank Number: | 11 |
| Status: | 1. In-Service |
| Date Installation: | 01/01/2006 |
| Capacity: | 275 |
| Product Stored: | 0022. Waste/Used Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 9. Modified double-walled (aboveground only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 1. Diking (aboveground only) |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 2. Suction |
| | |
| Tank Number: | 12 |
| Status: | 1. In-Service |
| Date Installation: | 01/01/2006 |
| Capacity: | 275 |
| Product Stored: | 0022. Waste/Used Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |

**SAFEGUARD RIVERDALE (Continued)** **S110539750**

| | |
|---|---|
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 9. Modified double-walled (aboveground only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 1. Diking (aboveground only) |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 13 |
| Status: | 3. Closed - Removed |
| Date Installation: | 10/01/1998 |
| Capacity: | 275 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 11/09/2009 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | Not reported |
| Piping Secondary Containment: | Not reported |
| Overfill Prevention: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 3. Gravity |

| | |
|---|---|
| Tank Number: | 14 |
| Status: | 3. Closed - Removed |
| Date Installation: | 10/01/1998 |
| Capacity: | 275 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 11/09/2009 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | Not reported |
| Piping Secondary Containment: | Not reported |

**SAFEGUARD RIVERDALE (Continued)** **S110539750**

| | |
|---|---|
| Overfill Prevention: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 3. Gravity |

SPILLS:

| | |
|---|---|
| Name: | DEVONSHIRE TIRE |
| Address: | 390 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1007244 / 2011-01-26 |
| Facility ID: | 1007244 |
| Facility Type: | ER |
| DER Facility ID: | 395643 |
| Site ID: | 440641 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 2010-10-06 |
| Investigator: | JKOMARA |
| Referred To: | Not reported |
| Reported to Dept: | 2010-10-06 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2010-10-06 |
| Spill Record Last Update: | 2011-01-26 |
| Spiller Name: | Not reported |
| Spiller Company: | DEVONSHIRE TIRE |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | PAUL WARHT |
| Latitude: | 40.9187317 |
| Longitude: | -73.9006986 |
| DEC Memo: | 10-6-10 Spoke with Jesse at Castlton. While pulling one UST they found a 2nd and then a 3rd tank<br>they didn't know about. Spoke with Stephan at WCHD. They have been on site already and will be<br>returning. I informed them of other unknown UST's that were located.<br>jm 1/25/11 Castlton<br>Environmental issued a UST removal report. Three UST's were removed along with 715.18 tons of<br>petroleum contaminated soil. Impacted soil remains in one location beneath the Firestone sign near<br>the road. NFA TG |
| Remarks: | 1000gal ust, removed/loss of product to soil |

All Materials:

| | |
|---|---|
| Site ID: | 440641 |
| Operable Unit ID: | 1191249 |
| Operable Unit: | 01 |

**SAFEGUARD RIVERDALE (Continued)** **S110539750**

| | |
|---|---|
| Material ID: | 2186371 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | COMMERCIAL |
| Address: | 390 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 2003284 / 2023-11-22 |
| Facility ID: | 2003284 |
| Facility Type: | ER |
| DER Facility ID: | 395643 |
| Site ID: | 609007 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 2020-07-24 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2020-07-24 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2020-07-24 |
| Spill Record Last Update: | 2023-11-22 |
| Spiller Name: | CHARLES POWERS |
| Spiller Company: | 390 RIVERDALE CORP |
| Spiller Address: | 390 RIVERDALE AVE |
| Spiller Company: | 999 |
| Contact Name: | CHARLES POWERS |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 7/24/20- Charlie from CNS was on site digging to find three tanks that were registered as abandoned in place and they actually came across about 13 tanks. Three of them were 6000 gallon, one was 3000 gallon, several were 1000 gallon, and a couple were 550 gallons. In a separate tank area a 1080 fuel oil tank contained sludge and staining was apparent in the soil. The site previously was a Citgo gas station and then an auto repair station and is being re-developed. Throughout the tank farm they smelled gasoline and saw gray discolored urban fill. Charlie |

**SAFEGUARD RIVERDALE (Continued)** **S110539750**

is in route to drop off
endpoint samples at which the PID readings were 25ppm. A contractor has been called to clean and
extract the tanks. The site has been dug to 15 feet deep, 280 yd. was removed. -KJ 07-28-20 Met
with CNS Environmental. The site had 13 USTs staged for removal. One remaining UST was observed at
the back of the property and had yet to be excavated. CNS to provide property owner information.
Soil samples were taken. No groundwater samples. BTR 08-11-20 Rec'd soil endpoint results. BTR
09-18-20 Requested GW investigation based on contamination observed on 7/28 and closure report for
last tank. BTR 10-19-20 Still no groundwater investigation. BTR
10-29-20 Request to WCHD for their
status and plans. jc 11-05-21 Received TCR and groundwater sampling results. BTR 02-25-21 Soil
management plan submitted. BTR 04/12/23 Emailed Charlie Powers requesting a final report. TG
03-02-21 Spoke to CNS Environmental. Soil management plan is approved. Contractor is on-site to
install pile foundation for storage building. BTR 03-24-21 Site visit. General contractor continues
to install piles. Monitoring wells are still in place. BTR 06-24-21 Received updated groundwater
tables and NFA request. BTR 07-13-21 Closure report is forthcoming. BTR 09-07-21 Received closure
report. BTR 12-28-21 FTS link was received 09/01/21 but unable to locate the report. Request CNS
Environmental to resubmit. Interim Remedial Report saved to D2. The consultant will submit a final
remedial report after another round of groundwater sampling and vapor barrier installation. BTR
09/08/22 Charlie Powers removed that three 275 USTs were discovered and removed yesterday. he will
update the WCHD PBS program and will excavate contaminated soil once the waste classification
sample results are returned. Will call when excavation work is scheduled to start. TG 06/20/23
Called Charlie Powers to request a closure report. He will send it in a day to two. TG 06/23/23
Charlie Powers submitted a Final Remedial Closure Report dated December 2022. See report in DecDocs
for details of the site remediation. NFA. TG

Remarks: unknown amount of gasoline was spilled, clean pending

All Materials:

| | |
|---|---|
| Site ID: | 609007 |
| Operable Unit ID: | 1356149 |
| Operable Unit: | 01 |
| Material ID: | 2367430 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |

**SAFEGUARD RIVERDALE (Continued)** **S110539750**

| | |
|---|---|
| Oxygenate: | Not reported |
| Site ID: | 609007 |
| Operable Unit ID: | 1356149 |
| Operable Unit: | 01 |
| Material ID: | 2367431 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

SPDES:

| | |
|---|---|
| Name: | Safeguard Riverdale |
| Address: | 390 RIVERDALE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| Permit Number: | NYR11G860 |
| State-Region: | 3 |
| Expiration Date: | Not reported |
| Current Major Minor Status: | Not reported |
| Primary Facility SIC Code: | Not reported |
| State Water Body Name: | Hudson River |
| Limit Set Status Flag: | Not reported |
| Total Actual Average Flow(MGD): | Not reported |
| Total App Design Flow(MGD): | Not reported |
| UDF1: | Not reported |
| Lat/Long: | 40.9188485 / -73.90061709999 |
| DMR Cognizant Official: | Not reported |
| UDF2: | Not reported |
| UDF3: | Not reported |
| FIPS County Code: | Not reported |
| Non-Gov Permit Affiliation Type Desc: | Not reported |
| Non-Gov Permit Org Formal Name: | Not reported |
| Non-Gov Permit Street Address: | Not reported |
| Non-Gov Permit Supplemental Location: | Not reported |
| Non-Gov Permit City: | Not reported |
| Non-Gov Permit State Code: | Not reported |
| Non-Gov Permit Zip Code: | Not reported |
| Non-Gov Facility Affiliation Type Desc: | Not reported |
| Non-Gov Facility Org Formal Name: | Not reported |
| Non-Gov Facility Street Address: | Not reported |
| Non-Gov Facility Supplemental Location: | Not reported |
| Non-Gov Facility City: | Not reported |
| Non-Gov Facility State Code: | Not reported |
| Non-Gov Facility Zip Code: | Not reported |
| State Water Body: | Not reported |
| Region Permit Processed: | Not reported |
| Dow Discharge Class Code: | Not reported |
| SPDES Class Description: | Not reported |
| Affiliation Type Description: | Not reported |
| Name: | Not reported |

**SAFEGUARD RIVERDALE (Continued)** **S110539750**

| | |
|---|---|
| Contacts Title: | Not reported |
| Contacts Email: | Not reported |
| NOI Submission Date: | Not reported |
| Facility Type: | Construction Permit - 2003_present |

**C15** **DEVONSHIRE LANE SERVICE** **RCRA NonGen / NLR** **1000410308**
**SSE** **390 RIVERDALE AVE** **FINDS** **NYD986888329**
**< 1/8** **YONKERS, NY 10705** **ECHO**
**0.033 mi.**
**175 ft.** **Site 3 of 5 in cluster C**

**Relative:**
**Higher**

**Actual:**
**64 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20070101 |
| Handler Name: | | Devonshire Lane Service |
| Handler Address: | | Riverdale Ave |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYD986888329 |
| Contact Name: | | Not reported |
| Contact Address: | | RIVERDALE AVE |
| Contact City,State,Zip: | | YONKERS, NY 10705 |
| Contact Telephone: | | Not reported |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Not reported |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R3 |
| Mailing Address: | | RIVERDALE AVE |
| Mailing City,State,Zip: | | YONKERS, NY 10705 |
| Owner Name: | Nat Warhit | |
| Owner Type: | | Private |
| Operator Name: | Nat Warhit | |
| Operator Type: | | Private |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |

**DEVONSHIRE LANE SERVICE (Continued)** **1000410308**

| | |
|---|---|
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150414 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Hazardous Waste Summary:

| | |
|---|---|
| Waste Code: | NONE |
| Waste Description: | Not Defined |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: NAT WARHIT | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | NOT REQUIRED |
| Owner/Operator City,State,Zip: | NOT REQUIRED, WY 99999 |
| Owner/Operator Telephone: | 212-555-1212 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: NAT WARHIT | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | NOT REQUIRED |
| Owner/Operator City,State,Zip: | NOT REQUIRED, WY 99999 |
| Owner/Operator Telephone: | 212-555-1212 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: NAT WARHIT | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |

**DEVONSHIRE LANE SERVICE (Continued)** **1000410308**

Owner/Operator Address: NOT REQUIRED
Owner/Operator City,State,Zip: NOT REQUIRED, WY 99999
Owner/Operator Telephone: 212-555-1212
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 19950414
Handler Name: DEVONSHIRE LANE SERVICE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20060101
Handler Name: DEVONSHIRE LANE SERVICE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20070101
Handler Name: DEVONSHIRE LANE SERVICE
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19900129
Handler Name: DEVONSHIRE LANE SERVICE
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No

**DEVONSHIRE LANE SERVICE (Continued)** **1000410308**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110004441408

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000410308
Registry ID: 110004441408

DFR URL:
Name: DEVONSHIRE LANE SERVICE
Address: 390 Riverdale Ave
City,State,Zip: YONKERS, NY 10705

---

**C16** **DEVONSHIRE 2010 INC.** **NY UST** **U003994483**
**SSE** **390 RIVERDALE AVENUE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.033 mi.**
**175 ft.** **Site 4 of 5 in cluster C**

**Relative: Higher**
**Actual: 64 ft.**

WESTCHESTER CO. UST:
Name: DEVONSHIRE 2010 INC.
Address: 390 RIVERDALE AVENUE
City,State,Zip: YONKERS, NY 10705
Id/Status: 3-138045 / Active
Operator Name: Devonshire 2010 Inc.
Owner Name: Devonshire 2010 Inc.
Owner Street: 390 Riverdale Avenue
Owner Address2: Not reported
Owner City: Yonkers
Owner State: NY
Owner Zipcode: 10705
GDS Number: Not reported

**DEVONSHIRE 2010 INC. (Continued)** **U003994483**

| | |
|---|---|
| Tank Number: | 1 |
| Status: | 4. Closed - in place |
| Capacity: | 6000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 07/01/1973 |
| Date Perm Closure: | 01/28/1979 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 0. No Pipiing |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 15 |
| Status: | 4. Closed - in place |
| Capacity: | 1000 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 07/01/1973 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 2 |
| Status: | 4. Closed - in place |
| Capacity: | 6000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 07/01/1973 |
| Date Perm Closure: | 07/28/1979 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |

**DEVONSHIRE 2010 INC. (Continued)** **U003994483**

| | |
|---|---|
| Piping Location: | 0. No Pipiing |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 3 |
| Status: | 4. Closed - in place |
| Capacity: | 6000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 07/01/1973 |
| Date Perm Closure: | 07/28/1979 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 0. No Pipiing |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**D17** **YONKERS MUNI.HOUSE AUTH.** **NY Spills** **S102154855**
**NNW** **RIVERDALE AVE & POST ST** **N/A**
**< 1/8** **YONKERS, NY**
**0.036 mi.**
**190 ft.** **Site 1 of 4 in cluster D**

**Relative:**
**Higher**

**Actual:**
**54 ft.**

SPILLS:

| | |
|---|---|
| Name: | YONKERS MUNI.HOUSE AUTH. |
| Address: | RIVERDALE AVE & POST ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9314274 / 1994-03-10 |
| Facility ID: | 9314274 |
| Facility Type: | ER |
| DER Facility ID: | 111891 |
| Site ID: | 129809 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 1994-03-07 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1994-03-07 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | 1994-03-10 |

**YONKERS MUNI.HOUSE AUTH. (Continued)** **S102154855**

| | |
|---|---|
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2003-12-02 |
| Spill Record Last Update: | 2003-12-02 |
| Spiller Name: | Not reported |
| Spiller Company: | CASTLE OIL |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Latitude: | 40.9205590 |
| Longitude: | -73.9013571 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | OPEN STICK WELL AS DRIVER MADE DELIVERY SAW OIL SPRAYING OUT OF STICK WELL FD PUT DOWN SPEEDI-DRI CASTLE OIL TO CLEAN UP |

All Materials:

| | |
|---|---|
| Site ID: | 129809 |
| Operable Unit ID: | 992567 |
| Operable Unit: | 01 |
| Material ID: | 389607 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 20.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**D18** **RIVERDALE AV** **NY Spills** **S106002145**
**NNW** **AND POST ST** **N/A**
**< 1/8** **YONKERS, NY**
**0.039 mi.**
**205 ft.** **Site 2 of 4 in cluster D**

**Relative:** **Higher**
**Actual:** **54 ft.**

SPILLS:

| | |
|---|---|
| Name: | RIVERDALE AV |
| Address: | AND POST ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0112161 / 2002-03-26 |
| Facility ID: | 0112161 |
| Facility Type: | ER |
| DER Facility ID: | 135053 |
| Site ID: | 159885 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 2002-03-26 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2002-03-26 |
| CID: | 405 |

**RIVERDALE AV (Continued)** **S106002145**

| | |
|---|---|
| Water Affected: | Not reported |
| Spill Source: | Tank Truck |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2002-03-26 |
| Spill Record Last Update: | 2002-05-30 |
| Spiller Name: | SAME |
| Spiller Company: | CRYSTAL TRANSPORTATION |
| Spiller Address: | 2010 WHITE PLAINS ROAD |
| Spiller Company: | 001 |
| Contact Name: | JOE MANSUETO |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'DEE |
| Remarks: | CALLER STATES THE HOSE ON THE TRUCK BROKE CAUSING THE SPILL - FD AND CLEAN UP CREW SITE - ALL BEING CLEANED UP AT THIS TIME |

All Materials:

| | |
|---|---|
| Site ID: | 159885 |
| Operable Unit ID: | 849114 |
| Operable Unit: | 01 |
| Material ID: | 526174 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 6.00 |
| Units: | G |
| Recovered: | 6.00 |
| Oxygenate: | Not reported |

---

**B19** **SPILL NUMBER 9810759** **NY LTANKS** **S104619834**
**WSW** **96 PURSER PLACE** **N/A**
**< 1/8** **YONKERS, NY**
**0.047 mi.**
**248 ft.** **Site 2 of 5 in cluster B**

**Relative:** LTANKS:
**Lower**

**Actual:**
**49 ft.**

| | |
|---|---|
| Name: | SPILL NUMBER 9810759 |
| Address: | 96 PURSER PLACE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9810759 / 2000-01-12 |
| Facility ID: | 9810759 |
| Site ID: | 236973 |
| Spill Date: | 1998-11-24 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |

**SPILL NUMBER 9810759 (Continued)** **S104619834**

| | |
|---|---|
| Referred To: | Not reported |
| Reported to Dept: | 1998-11-24 |
| CID: | 384 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1998-11-24 |
| Spill Record Last Update: | 2008-12-09 |
| Spiller Name: | Not reported |
| Spiller Company: | THOMAS KEANE |
| Spiller Address: | NO INFO AVAIABLE |
| Spiller County: | 001 |
| Spiller Contact: | JOSEPHINE JURADO:SUPT. |
| Spiller Phone: | (914) 968-3314 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 195226 |
| Latitude: | 40.9190590 |
| Longitude: | -73.9022039 |
| DEC Memo: | 01/12/2000 NES PULLED TANK. NO DISCHARGE; NFA jod |
| Remarks: | TESTED FOR AN APPLICATION FOR THE CLEAR PROGRAM. 11/24/98 V. MCCABE CONTACTED JURADO - NO ANSWER. |

All TTF:

| | |
|---|---|
| Facility ID: | 9810759 |
| Spill Number: | 9810759 |
| Spill Tank Test: | 1546569 |
| Site ID: | 236973 |
| Tank Number: | Not reported |
| Tank Size: | 1000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | F |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 236973 |
| Operable Unit ID: | 1071758 |
| Operable Unit: | 01 |
| Material ID: | 314624 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |

**SPILL NUMBER 9810759 (Continued)** **S104619834**

Recovered: .00
Oxygenate: Not reported

---

**B20** **SPANOS GARAGE** **EDR Hist Auto** **1020496044**
**SW** **397 RIVERDALE AVENUE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.047 mi.**
**250 ft.** **Site 3 of 5 in cluster B**

**Relative:** EDR Hist Auto
**Higher**

**Actual:** Year: Name: Type:
**52 ft.** 1980 SPANOS GARAGE Gasoline Service Stations

---

**B21** **TAUB-SILVA RESIDENCE** **NY LTANKS** **S112148809**
**WSW** **104 PURSER PLACE** **N/A**
**< 1/8** **YONKERS, NY**
**0.052 mi.**
**273 ft.** **Site 4 of 5 in cluster B**

**Relative:** LTANKS:
**Lower**

**Actual:**
**50 ft.**

| | |
|---|---|
| Name: | TAUB-SILVA RESIDENCE |
| Address: | 104 PURSER PLACE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1203009 / 2012-10-03 |
| Facility ID: | 1203009 |
| Site ID: | 465795 |
| Spill Date: | 2012-06-26 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2012-06-26 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2012-06-26 |
| Spill Record Last Update: | 2012-10-03 |
| Spiller Name: | Not reported |
| Spiller Company: | PVT. DWELLING |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | JEFF MCKENZIE |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 420146 |

**TAUB-SILVA RESIDENCE (Continued)** **S112148809**

| | |
|---|---|
| Latitude: | 40.9190417 |
| Longitude: | -73.9019886 |
| DEC Memo: | 6-26-12 Called and left message for Jeff to return call. Recv'd callback from Laura at Advanced Tank Testing. She said that they do not have any further info on test results but would have Jeff call back tomorrow. They were hire ny potential buyer of property. jm 10/03/12 ATS submitted passing retest results. NFA. TG |
| Remarks: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 465795 |
| Operable Unit ID: | 1215809 |
| Operable Unit: | 01 |
| Material ID: | 2213957 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**B22** **STUPP** **NY LTANKS** **S104620779**
**SW** **110 PURSER PLACE** **N/A**
**< 1/8** **YONKERS, NY**
**0.058 mi.**
**308 ft.** **Site 5 of 5 in cluster B**

**Relative:**
**Higher**

**Actual:**
**53 ft.**

LTANKS:

| | |
|---|---|
| Name: | STUPP |
| Address: | 110 PURSER PLACE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9911693 / 2012-01-31 |
| Facility ID: | 9911693 |
| Site ID: | 142858 |
| Spill Date: | 2000-01-07 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2000-01-07 |
| CID: | 205 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2000-01-07 |
| Spill Record Last Update: | 2012-01-31 |
| Spiller Name: | OWNER |
| Spiller Company: | JEROME STUPP |

**STUPP (Continued)** **S104620779**

| | |
|---|---|
| Spiller Address: | 110 PURSER PL |
| Spiller County: | 001 |
| Spiller Contact: | CALLER |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 121881 |
| Latitude: | 40.9188430 |
| Longitude: | -73.9022193 |
| DEC Memo: | Homeowner was adviced to retest. Will make a decision as to how to proceed. 01/12/00: Letter sent to owner outlining requirements for closure and requesting call back. jod 12/16/09 JO'Dee will check up JO'M 1/23/12: Call to dispatch desk. Caller states he is an attorney for this estate. Owner was Jerome Stupp who has passed away. Caller states NES was hired to remove this UST more than 10 years ago and did so. No closure report was submitted. I asked caller if NES was notified of the TTF and open spill number in order to submit a report. I also asked if he contacted NES and he says he has, but they do not have records going back this far. Caller states he does have copies of the invoice/bill from NES, and the Yonker FD work permit. He will fax them to me for review. jod 1/25/12: I reviewed the original invoices from NES. NES removed the 1K UST on 3-29-2000 and then installed a new 1K STIP3 UST on 3-30-2000. Mr Stupp paid the 30% down payment - there is no indication the balance was paid. I contacted NES to see if they had a closure report in their records. jod 1/31/12: NES has no record of this job in their files. It is probable this tank removal was handled by Nick Barnaba who no longer works for NES. From the information provided, this UST was removed and replaced, there is no indication the tank was leaking at that time. Based upon the available information, no further action is required at this time. jod |
| Remarks: | TESTED TANK. TANK FAILED. |

All TTF:

| | |
|---|---|
| Facility ID: | 9911693 |
| Spill Number: | 9911693 |
| Spill Tank Test: | 1547978 |
| Site ID: | 142858 |
| Tank Number: | 1 |
| Tank Size: | 1000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 142858 |
| Operable Unit ID: | 1090388 |
| Operable Unit: | 01 |
| Material ID: | 297143 |

**STUPP (Continued)** **S104620779**

| | |
|---|---|
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**E23** **FIVE GRAND INC.** **NY AST** **A100355449**
**SSW** **402-404 RIVERDALE AVENUE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.063 mi.**
**332 ft.** **Site 1 of 11 in cluster E**

**Relative:**
**Higher**

**Actual:**
**57 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | FIVE GRAND INC. |
| Address: | 402-404 RIVERDALE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-183601 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | FIVE GRAND INC |
| Owner Name: | Five Grand Inc. |
| Owner Street: | 1278 Saw Mill River Road |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10710 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 10/01/1952 |
| Capacity: | 1500 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | Not reported |
| Piping Location: | Not reported |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | Not reported |
| Piping Secondary Containment: | Not reported |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | Not reported |
| Dispenser: | 3. Gravity |

**E24**
**SSW**
**< 1/8**
**0.063 mi.**
**332 ft.**

**CRP RIVERDALE LLC**
**402-404 RIVERDALE AVENUE**
**YONKERS, NY 10705**

**Site 2 of 11 in cluster E**

**NY AST** **A100540344**
**N/A**

**Relative:**
**Higher**

**Actual:**
**57 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | CRP RIVERDALE LLC |
| Address: | 402-404 RIVERDALE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-800915 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Liberty Place Property Mgmt |
| Owner Name: | CRP Riverdale LLC |
| Owner Street: | 1841 Broadway |
| Owner Address2: | suite 400 |
| Owner City/State/Zip: | NY, NY 10023 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 10/28/1952 |
| Capacity: | 1500 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None,5. In-Tank System (auto tank gauge) |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 5. Vent Whistle |
| Spill Prevention: | 0. None |
| Dispenser: | 3. Gravity |

---

**D25**
**NNW**
**< 1/8**
**0.065 mi.**
**341 ft.**

**FLYNN MANNOR**
**334 RIVERDALE AVE**
**YONKERS, NY**

**Site 3 of 4 in cluster D**

**NY LTANKS** **S111317594**
**NY Spills** **N/A**

**Relative:**
**Higher**

**Actual:**
**57 ft.**

LTANKS:

| | |
|---|---|
| Name: | FLYNN MANNOR |
| Address: | 334 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0403465 / 2004-12-10 |
| Facility ID: | 0403465 |
| Site ID: | 287165 |
| Spill Date: | 2004-06-16 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Non Major Facility > 1,100 gal |
| Spill Class: | D3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |

**FLYNN MANNOR (Continued)** **S111317594**

| | |
|---|---|
| Investigator: | WCHD |
| Referred To: | WESTCHESTER CNTY HEALTH D |
| Reported to Dept: | 2004-06-30 |
| CID: | 408 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2004-06-30 |
| Spill Record Last Update: | 2004-12-10 |
| Spiller Name: | JOHN BURKHART |
| Spiller Company: | FLYNN MANNOR |
| Spiller Address: | 334 RIVERDALE AVE |
| Spiller County: | 001 |
| Spiller Contact: | JOHN BURKHART |
| Spiller Phone: | (914) 438-3501 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 232614 |
| Latitude: | 40.9210927 |
| Longitude: | -73.9010301 |
| DEC Memo: | 12/10/04 PBS facility. Tank passed a retest after piping was repaired. Spill file closed by Danielle Jackson of the Westchester County Health Dept. No further action is required at this time. jbo |
| Remarks: | REBOLT GASKET AND MAINWAY AND RETEST |

| | |
|---|---|
| Name: | 334 RIVERDALE AVE |
| Address: | 334 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0806549 / 2010-11-30 |
| Facility ID: | 0806549 |
| Site ID: | 403832 |
| Spill Date: | 2008-08-05 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jkomara |
| Referred To: | WCDOH |
| Reported to Dept: | 2008-09-11 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2008-09-11 |
| Spill Record Last Update: | 2010-11-30 |
| Spiller Name: | JOHN BURKHARDT |
| Spiller Company: | YONKERS HOUSING AUTHORITY |
| Spiller Address: | 334 RIVERDALE AVE |

**FLYNN MANNOR (Continued)** **S111317594**

| | |
|---|---|
| Spiller County: | 999 |
| Spiller Contact: | JEFF SOSINSKI |
| Spiller Phone: | (201) 797-1909 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 232614 |
| Latitude: | 40.9210957 |
| Longitude: | -73.9010222 |
| DEC Memo: | Repairs were made for the second retest. Westchester Cty DOH has been notified. 9/12/08: Wayne Schneider from WCDOH/PBS following up. jod PBS Data > 3-600082 John E Flynn Manor Yonkers (914)793-8481 Contact: Alex Montez |
| Remarks: | CALLER STATES THAT A 10,000GALLON TANK FAILED, IT WAS ABOVE THE OIL LEVEL. NO SPILL OCCURED. TANK PASSED SECOND TEST ON AUGUST 27, 2008. |

All Materials:

| | |
|---|---|
| Site ID: | 403832 |
| Operable Unit ID: | 1160519 |
| Operable Unit: | 01 |
| Material ID: | 2151694 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | APT BUILDING |
| Address: | 334 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1108612 / Not Reported |
| Facility ID: | 1108612 |
| Facility Type: | ER |
| DER Facility ID: | 232614 |
| Site ID: | 456353 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 2011-10-07 |
| Investigator: | RDBENDEL |
| Referred To: | Not reported |
| Reported to Dept: | 2011-10-07 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 4 |

**FLYNN MANNOR (Continued)** **S111317594**

| | |
|---|---|
| Date Entered In Computer: | 2011-10-07 |
| Spill Record Last Update: | 2018-06-06 |
| Spiller Name: | JOHN BURKHARDT |
| Spiller Company: | C/YONKERS HOUSING AUTH |
| Spiller Address: | 334 RIVERDALE AVE |
| Spiller Company: | 999 |
| Contact Name: | ALEX AMOROSO |
| Latitude: | 40.9210957 |
| Longitude: | -73.9010222 |
| DEC Memo: | 10-7-11: V.Mc. call to Mr.J.Burkhardt: Converting buildings to natural gas or geo-themo well for heating & hot water. UST was removed last week, but only recently found oil in sump pit. No discharge from sump pit. Sump pit to be cleanned out completely. 10-7-11: V.Mc. call to Carlos/WCHD : Left Mess.: Req.Callbk & Req. Site inspection. 1-12-16 emailed the 6 open spills to Matt Foley At Yonkers Building dept; 914-384-4088.Spill list; 13-10017, 11-08612, 89-02346,97-05149, 94-12912, 15-05884. RDB changed lead from JOM 2-1-16 Response from City of Yonkers to update the open spills. Need to review and respond. RDB 2-1-16 No update on this spill from COY. I m not aware of a spill at 334 Riverdale Ave and 1086 North Broadway .- This will remain open-RDB 06-06-18 Requested closure report from COY. Municipal Housing Authority is searching for the documentation. BTR |
| Remarks: | in sump - cleanup pending |

All Materials:

| | |
|---|---|
| Site ID: | 456353 |
| Operable Unit ID: | 1206489 |
| Operable Unit: | 01 |
| Material ID: | 2203597 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | MUNICIPAL HOUSING AUTHORITY |
| Address: | 334 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1101971 / 2011-06-06 |
| Facility ID: | 1101971 |
| Facility Type: | ER |
| DER Facility ID: | 232614 |
| Site ID: | 449451 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 2011-05-23 |
| Investigator: | jbodee |

**FLYNN MANNOR (Continued)** **S111317594**

| | |
|---|---|
| Referred To: | Not reported |
| Reported to Dept: | 2011-05-23 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2011-05-23 |
| Spill Record Last Update: | 2011-06-06 |
| Spiller Name: | Not reported |
| Spiller Company: | CONTRACTOR |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | ANON |
| Latitude: | 40.9210957 |
| Longitude: | -73.9010222 |
| DEC Memo: | 5-23-11 Spoke with Chris at WCHD - they are responding and will call back with update. jm >>> Lalak, Chris 5/24/2011 9:47 AM >>> 1101971 Joe Mancini inspected site yesterday Yonkers Housing Auth. Boiler being dismantled and water leak sent residual oil into sump (the day before spill was reported). 6/6/11: DEC requires NFA at this time. jod |
| Remarks: | SPILL TO BASEMENT, TO PUMP WHICH EMPTIES INTO DRAIN/SEWER. |

All Materials:

| | |
|---|---|
| Site ID: | 449451 |
| Operable Unit ID: | 1199664 |
| Operable Unit: | 01 |
| Material ID: | 2196042 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**D26** **JOHN E. FLYNN MANOR** **NY UST** **U004440587**
**NNW** **334 RIVERDALE AVENUE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.065 mi.**
**341 ft.** **Site 4 of 4 in cluster D**

**Relative:** WESTCHESTER CO. UST:
**Higher**

| | |
|---|---|
| Name: | JOHN E. FLYNN MANOR |
| Address: | 334 RIVERDALE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-600082 / Unregulated |
| Operator Name: | Lou Egiazaco |
| Owner Name: | The Municipal Housing Auth For The City Of Yonkers |

**Actual:**
**57 ft.**

**JOHN E. FLYNN MANOR (Continued)** **U004440587**

| | |
|---|---|
| Owner Street: | 1511 Central Park Ave. |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10710 |
| GDS Number: | Not reported |

| | |
|---|---|
| Tank Number: | 1 |
| Status: | 4. Closed - in place |
| Capacity: | 10000 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 06/01/1967 |
| Date Perm Closure: | 10/01/2005 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | Not reported |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 6. Wrapped (Piping) |
| Overfill Prevention: | Not reported |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | Not reported |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 2 |
| Status: | 4. Closed - in place |
| Capacity: | 10000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 5. In-Tank System (auto tank gauge) |
| Date Installation: | 08/01/1990 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 2. Sacrificial Anode (no retrofit) |
| Tank Secondary Containment: | Not reported |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 6. Wrapped (Piping) |
| Overfill Prevention: | 2. High Level Alarm |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | Not reported |
| Dispenser: | 2. Suction |

**F27** **ROSARIO - UST** **NY Spills** **S117975120**
**East** **15 CLIFF AVE** **N/A**
**< 1/8** **YONKERS, NY**
**0.067 mi.**
**353 ft.** **Site 1 of 5 in cluster F**

**Relative:**
**Higher**

**Actual:**
**96 ft.**

SPILLS:

| | |
|---|---|
| Name: | ROSARIO - UST |
| Address: | 15 CLIFF AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1503602 / 2015-08-17 |
| Facility ID: | 1503602 |
| Facility Type: | ER |
| DER Facility ID: | 464522 |
| Site ID: | 509913 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 2015-07-02 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2015-07-02 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Private Dwelling |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2015-07-02 |
| Spill Record Last Update: | 2015-08-17 |
| Spiller Name: | ROSARIO |
| Spiller Company: | Rosario (House Fire) |
| Spiller Address: | 15 CLIFF AVE |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 7-2-15 Spoke with Lou. This is abandon house that had fire. New owner is rehabbing. 1k tank with no room for removal due to structural constraints. Drilled thru bottom of tank and got PID reading of 170ish ppm. They will run sample and see what results show and go from there. Under tank is sandy. Site is in the middle of the city with houses only several feet apart from one another. jm 8/17/15: C2G Environmental disposed of the leaking UST and one drum of petroleum contaminated soil. Soil sample results submitted for review. Tank Closure Report entered into DecDocs system. Based upon the information provided, no further action is required at this time. jod |
| Remarks: | soil affected - 2 sm. holes in tank - clean up pending |

All Materials:

| | |
|---|---|
| Site ID: | 509913 |

**ROSARIO - UST (Continued)** **S117975120**

| | |
|---|---|
| Operable Unit ID: | 1259188 |
| Operable Unit: | 01 |
| Material ID: | 2262471 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**C28** **LIVINGSTON REALTY ASSOCIATES, LLC** **NY AST** **A100361844**
**SSE** **145 LIVINGSTON AVE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.070 mi.**
**367 ft.** **Site 5 of 5 in cluster C**

**Relative:** **Higher**

**Actual:** **70 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | LIVINGSTON REALTY ASSOCIATES, LLC |
| Address: | 145 LIVINGSTON AVE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-164755 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Yovan Vasquez |
| Owner Name: | Livingston Realty Assoc., LLC |
| Owner Street: | 1601 Bronxdale Avenue, |
| Owner Address2: | Ste. 201 |
| Owner City/State/Zip: | Bronx, NY 10462 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 12/01/1984 |
| Capacity: | 2000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 5. Jacketed |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | Not reported |
| Piping Secondary Containment: | Not reported |
| Overfill Prevention: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

**G29** **PEARLS HAWTHORNE SCHOOL** **NY UST** **U004460570**
**West** **348 HAWTHORNE AVENUE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.078 mi.**
**414 ft.** **Site 1 of 6 in cluster G**

**Relative:** NY UST:
**Lower** No Details: No Details

**Actual:**
**47 ft.**

---

**G30** **YONKERS PUBLIC SCHOOL - HAWTHORNE PEARL** **RCRA NonGen / NLR** **1007112418**
**West** **348 HAWTHORNE RD** **NY MANIFEST** **NYR000051292**
**< 1/8** **YONKERS, NY 10705**
**0.078 mi.**
**414 ft.** **Site 2 of 6 in cluster G**

**Relative:** RCRA Listings:
**Lower**

**Actual:**
**47 ft.**

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20070101 |
| Handler Name: | | Yonkers Public School - Hawthorne Pearl |
| Handler Address: | | Hawthorne Rd |
| Handler City,State,Zip: | | YONKERS, NY 10705-1831 |
| EPA ID: | | NYR000051292 |
| Contact Name: | | BELA HERSHKOWITZ |
| Contact Address: | | PALMER RD |
| Contact City,State,Zip: | | YONKERS, NY 10701 |
| Contact Telephone: | | 914-376-8008 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Not reported |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R3 |
| Mailing Address: | | PALMER RD |
| Mailing City,State,Zip: | | YONKERS, NY 10701 |
| Owner Name: | Yonkers Public Schools | |
| Owner Type: | | District |
| Operator Name: | Yonkers Public Schools | |
| Operator Type: | | District |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |

**YONKERS PUBLIC SCHOOL - HAWTHORNE PEARL (Continued)** **1007112418**

| | |
|---|---|
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150414 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Hazardous Waste Summary:

| | |
|---|---|
| Waste Code: | D001 |
| Waste Description: | Ignitable Waste |
| Waste Code: | D002 |
| Waste Description: | Corrosive Waste |
| Waste Code: | D008 |
| Waste Description: | Lead |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: YONKERS PUBLIC SCHOOLS | |
| Legal Status: | District |
| Date Became Current: | 20010101 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 145 PALMER RD |
| Owner/Operator City,State,Zip: | YONKERS, NY 10701 |
| Owner/Operator Telephone: | 914-376-8008 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: YONKERS PUBLIC SCHOOLS | |
| Legal Status: | District |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 145 PALMER RD |

**YONKERS PUBLIC SCHOOL - HAWTHORNE PEARL (Continued)** **1007112418**

Owner/Operator City,State,Zip: YONKERS, NY 10701
Owner/Operator Telephone: 914-376-8008
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: YONKERS PUBLIC SCHOOLS
Legal Status: District
Date Became Current: 20010101
Date Ended Current: Not reported
Owner/Operator Address: 145 PALMER RD
Owner/Operator City,State,Zip: YONKERS, NY 10701
Owner/Operator Telephone: 914-376-8008
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20060101
Handler Name: YONKERS PUBLIC SCHOOL - HAWTHORNE PEARL
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20070101
Handler Name: YONKERS PUBLIC SCHOOL - HAWTHORNE PEARL
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19980305
Handler Name: YONKERS PUBLIC SCHOOL - HAWTHORNE PEARL
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

**YONKERS PUBLIC SCHOOL - HAWTHORNE PEARL (Continued)** **1007112418**

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYR000051292 |
| Country: | USA |
| Name: | Hawthorne Pearl School |
| Address: | 348 HAWTHORNE RD |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705-1831 |
| Zip 4: | Not reported |
| Location Address 1: | 348 HAWTHORNE RD |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 11705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Hawthorne Pearl School |
| Mailing Contact: | William Oluoi |
| Mailing Address 1: | 348 HAWTHORNE RD |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | YONKERS, NY 11705 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 9143768008 |

Manifest Data:

| | |
|---|---|
| Document ID: | NYG0582741 |
| Manifest Status: | Not reported |
| Trans1 State ID: | PD1011NY |
| Year: | 1998 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 03/13/1998 |
| Trans1 Recv Date: | 03/13/1998 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 03/13/1998 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYR000051292 |
| Trans1 EPA ID: | NYD077444263 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD077444263 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |

**YONKERS PUBLIC SCHOOL - HAWTHORNE PEARL (Continued)** **1007112418**

| | |
|---|---|
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Corrosive Waste |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00150 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |
| Waste Code 7: | Corrosive Waste |
| Waste Code 8: | Not reported |
| Waste Code: | Not reported |
| Waste Code 10: | Not reported |
| Waste Code 11: | Not reported |
| Quantity: | 00100 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |
| Waste Code 12: | Corrosive Waste |
| Waste Code 13: | Not reported |
| Waste Code 14: | Not reported |
| Waste Code 15: | Not reported |
| Waste Code 16: | Not reported |
| Quantity: | 00005 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |
| Waste Code 17: | Ignitable Waste |
| Waste Code 18: | Not reported |
| Waste Code 19: | Not reported |
| Waste Code 20: | Not reported |
| Waste Code 21: | Not reported |
| Quantity: | 00002 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYG0582759 |

**YONKERS PUBLIC SCHOOL - HAWTHORNE PEARL (Continued)** **1007112418**

| | |
|---|---|
| Manifest Status: | Not reported |
| Trans1 State ID: | PD1011NY |
| Year: | 1998 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 03/13/1998 |
| Trans1 Recv Date: | 03/13/1998 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 03/13/1998 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYR000051292 |
| Trans1 EPA ID: | NYD077444263 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD077444263 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Ignitable Waste |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00010 |
| Units: | Pounds |
| Number of Containers: | 002 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| Waste Code 7: | Formaldehyde |
| Waste Code 8: | Not reported |
| Waste Code: | Not reported |
| Waste Code 10: | Not reported |
| Waste Code 11: | Not reported |
| Quantity: | 00030 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| Waste Code 12: | Ignitable Waste |
| Waste Code 13: | Not reported |
| Waste Code 14: | Not reported |
| Waste Code 15: | Not reported |
| Waste Code 16: | Not reported |
| Quantity: | 00020 |
| Units: | Pounds |

**YONKERS PUBLIC SCHOOL - HAWTHORNE PEARL (Continued)** **1007112418**

| | |
|---|---|
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| Waste Code 17: | Phenol |
| Waste Code 18: | Not reported |
| Waste Code 19: | Not reported |
| Waste Code 20: | Not reported |
| Waste Code 21: | Not reported |
| Quantity: | 00020 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | NYG0582768 |
| Manifest Status: | Not reported |
| Trans1 State ID: | PD1011NY |
| Year: | 1998 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 03/13/1998 |
| Trans1 Recv Date: | 03/13/1998 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 03/13/1998 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYR000051292 |
| Trans1 EPA ID: | NYD077444263 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD077444263 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Corrosive Waste |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00015 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |
| Waste Code 7: | Phenol |

**YONKERS PUBLIC SCHOOL - HAWTHORNE PEARL (Continued)** **1007112418**

| | |
|---|---|
| Waste Code 8: | Not reported |
| Waste Code: | Not reported |
| Waste Code 10: | Not reported |
| Waste Code 11: | Not reported |
| Quantity: | 00025 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

---

**G31** **YONKERS PUBLIC SCHOOL** **NY LTANKS** **S102151772**
**West** **348 HAWTHORNE AVE** **NY AST** **N/A**
**< 1/8** **YONKERS, NY** **NY Spills**
**0.078 mi.**
**414 ft.** **Site 3 of 6 in cluster G**

**Relative:** **Lower**

**Actual:** **47 ft.**

LTANKS:

| | |
|---|---|
| Name: | YONKERS PUBLIC SCHOOL |
| Address: | 348 HAWTHORNE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9402336 / 1994-05-24 |
| Facility ID: | 9402336 |
| Site ID: | 88195 |
| Spill Date: | 1994-05-17 |
| Spill Cause: | Tank Overfill |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | D3 |
| Cleanup Ceased: | 1994-05-24 |
| SWIS: | 6018 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1994-05-17 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Responsible Party |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1994-05-24 |
| Spill Record Last Update: | 1994-06-07 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 306557 |
| Latitude: | 40.9202384 |
| Longitude: | -73.9030750 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY 06/07/94: NO DEC RESPONSE. |
| Remarks: | TANK OVERFILL CONTAINED ON CONCRETE FLOOR CASTLE OIL TO SEND CLEAN UP |

**YONKERS PUBLIC SCHOOL (Continued)** **S102151772**

CREW

All Materials:

| | |
|---|---|
| Site ID: | 88195 |
| Operable Unit ID: | 996128 |
| Operable Unit: | 01 |
| Material ID: | 386071 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 10.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | PEARLS HAWTHORNE SCHOOL |
| Address: | 348 HAWTHORNE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-413534 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Yonkers Public Schools |
| Owner Name: | Yonkers Public Schools |
| Owner Street: | One Larkin Center |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10701 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 12/01/1966 |
| Capacity: | 20000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 6. Impervious Barrier/Concrete Pad (Aboveground Only) |
| Tank Secondary Containment: | 2. Vault (w/ access) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 9. Exempt suction piping |
| Piping Secondary Containment: | 2. Vault (w/ access) |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 2. Suction |

SPILLS:

| | |
|---|---|
| Name: | YONKERS SCHOOLS |
| Address: | 348 HAWTHORNE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0608155 / 2006-10-20 |

**YONKERS PUBLIC SCHOOL (Continued)** **S102151772**

| | |
|---|---|
| Facility ID: | 0608155 |
| Facility Type: | ER |
| DER Facility ID: | 306557 |
| Site ID: | 372052 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 2006-10-16 |
| Investigator: | JBODee |
| Referred To: | WCDOH |
| Reported to Dept: | 2006-10-17 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2006-10-17 |
| Spill Record Last Update: | 2006-10-25 |
| Spiller Name: | ROBERT COMIZIO |
| Spiller Company: | YONKERS SCHOOLS |
| Spiller Address: | 348 HAWTHORNE AVE |
| Spiller Company: | 001 |
| Contact Name: | ROBERT COMIZIO |
| Latitude: | 40.9202317 |
| Longitude: | -73.9025585 |
| DEC Memo: | Not reported |
| Remarks: | LESS THEN 1/2 GALLON- ALL CONTAINED AND ALL CLEANED UP: WAS A PUMP LEAK |

All Materials:

| | |
|---|---|
| Site ID: | 372052 |
| Operable Unit ID: | 1129805 |
| Operable Unit: | 01 |
| Material ID: | 2119468 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | HAWTHORNE JR. HIGH |
| Address: | 348 HAWTHORNE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9111408 / 1992-02-12 |
| Facility ID: | 9111408 |
| Facility Type: | ER |
| DER Facility ID: | 306557 |
| Site ID: | 88194 |

**YONKERS PUBLIC SCHOOL (Continued)** **S102151772**

| | |
|---|---|
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Not reported |
| SWIS: | 6018 |
| Spill Date: | 1991-02-05 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1992-02-05 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 1953-06-18 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1992-02-12 |
| Spill Record Last Update: | 1992-03-10 |
| Spiller Name: | Not reported |
| Spiller Company: | SAME |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Latitude: | 40.9202384 |
| Longitude: | -73.9030750 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | FAULTY GUAGE ON THE OIL BURNER RELEASED A SMALL AMOUNT OF OIL MOST OF IT WAS CLEANED UP WITH SPEEDI-DRY AND A SMAL AMOUNT GOT INTO A DRAIN WHICH DISCHARGES INTO THE STORM DRAIN |

All Materials:

| | |
|---|---|
| Site ID: | 88194 |
| Operable Unit ID: | 965128 |
| Operable Unit: | 01 |
| Material ID: | 416444 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 5.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | PEARLS HAWTHORNES ELEM SCHOOL |
| Address: | 348 HAWTHORNE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0510506 / 2006-12-27 |
| Facility ID: | 0510506 |
| Facility Type: | ER |
| DER Facility ID: | 306557 |
| Site ID: | 356495 |
| DEC Region: | 3 |
| Spill Cause: | Unknown |

**YONKERS PUBLIC SCHOOL (Continued)** **S102151772**

| | |
|---|---|
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 2005-12-07 |
| Investigator: | JBODee |
| Referred To: | WCDOH |
| Reported to Dept: | 2005-12-07 |
| CID: | 408 |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Health Department |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-12-07 |
| Spill Record Last Update: | 2006-12-27 |
| Spiller Name: | MR. CAMPINAERO |
| Spiller Company: | PEARLS HAWTHORNES ELEM. S |
| Spiller Address: | 348 HAWTHORNE AVE |
| Spiller Company: | 001 |
| Contact Name: | MR. CAMPINAERO |
| Latitude: | 40.9202360 |
| Longitude: | -73.9030770 |
| DEC Memo: | 0510506 - 348 hawthorne ave, yonkers - spill from boiler room valve, cleaned up 12-12-05 NFA |
| Remarks: | PBS No: 3-414534 WASHED DOWN INTO A SEWER DRAIN. CAUSE IS UNDER INVESTIGATION. |

All Materials:

| | |
|---|---|
| Site ID: | 356495 |
| Operable Unit ID: | 1113800 |
| Operable Unit: | 01 |
| Material ID: | 2103857 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**H32** **MR RAPICKI** **NY Spills** **S102152102**
**SE** **49 CLIFF AVE** **N/A**
**< 1/8** **YONKERS, NY**
**0.082 mi.**
**432 ft.** **Site 1 of 7 in cluster H**

**Relative:** **Higher**

**Actual:** **100 ft.**

SPILLS:

| | |
|---|---|
| Name: | MR RAPICKI |
| Address: | 49 CLIFF AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9206795 / 1992-09-15 |
| Facility ID: | 9206795 |
| Facility Type: | ER |

**MR RAPICKI (Continued)** **S102152102**

| | |
|---|---|
| DER Facility ID: | 237319 |
| Site ID: | 293197 |
| DEC Region: | 3 |
| Spill Cause: | Deliberate |
| Spill Class: | A3 |
| SWIS: | 6018 |
| Spill Date: | 1992-09-12 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1992-09-12 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Private Dwelling |
| Spill Notifier: | Citizen |
| Cleanup Ceased: | 1992-09-15 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1992-09-15 |
| Spill Record Last Update: | 2004-01-21 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Latitude: | 40.9184693 |
| Longitude: | -73.8989360 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | HOMEOWNER INSTALLING NEW BOILER REMOVING ASBESTOS AND STORING IT OUT SIDE REFER TO HEALTH DEPT. |

All Materials:

| | |
|---|---|
| Site ID: | 293197 |
| Operable Unit ID: | 970599 |
| Operable Unit: | 01 |
| Material ID: | 407487 |
| Material Code: | 0026A |
| Material Name: | asbestos |
| Case No.: | 01332214 |
| Material FA: | Hazardous Material |
| Quantity: | .00 |
| Units: | L |
| Recovered: | .00 |
| Oxygenate: | Not reported |

**G33** **FORECLOSER - UST** **NY Spills** **S125361041**
**WSW** **56 CULVER ST** **N/A**
**< 1/8** **YONKERS, NY**
**0.082 mi.**
**433 ft.** **Site 4 of 6 in cluster G**

**Relative:** **Lower**

**Actual:** **49 ft.**

SPILLS:

| | |
|---|---|
| Name: | FORECLOSER - UST |
| Address: | 56 CULVER ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1907273 / 2019-11-20 |
| Facility ID: | 1907273 |
| Facility Type: | ER |
| DER Facility ID: | 541482 |
| Site ID: | 595384 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 2019-10-18 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2019-10-18 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Private Dwelling |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2019-10-18 |
| Spill Record Last Update: | 2019-11-20 |
| Spiller Name: | Not reported |
| Spiller Company: | C2GRE, LLC |
| Spiller Address: | Not reported |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 10/18/19 Barrier removed 550 UST, found contaminated soil. Removed 10-15 tons of soil, staging contaminated soil on and covering it with plastic. Took end soil samples for analysis. No groundwater, no waterways, property on municipal water. Reports to be sent to J. O'Dee. ga Previously reported TTF is Spill 1903379. jod 11/20/2019: Barrier Environmental removed the leaking UST and disposed of 18.30 tons of petroleum contaminated soil. Post excavation soil sample results were below CP-51 Guidance values. Report has been reviewed and entered in DecDocs. Based upon the information provided, no further action is required at this time. jod |
| Remarks: | c/u is pending |

All Materials:

| | |
|---|---|
| Site ID: | 595384 |
| Operable Unit ID: | 1342939 |

**FORECLOSER - UST (Continued)** **S125361041**

| | |
|---|---|
| Operable Unit: | 01 |
| Material ID: | 2353042 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**G34** **BATISTA - TTF** **NY LTANKS** **S124518448**
**WSW** **56 CULVER ST** **N/A**
**< 1/8** **YONKERS, NY**
**0.082 mi.**
**433 ft.** **Site 5 of 6 in cluster G**

**Relative:** LTANKS:
**Lower**

**Actual:**
**49 ft.**

| | |
|---|---|
| Name: | BATISTA - TTF |
| Address: | 56 CULVER ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1903379 / 2019-10-23 |
| Facility ID: | 1903379 |
| Site ID: | 591337 |
| Spill Date: | 2019-07-02 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2019-07-02 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2019-07-02 |
| Spill Record Last Update: | 2019-10-23 |
| Spiller Name: | MARIA BATISTA |
| Spiller Company: | Batista - ttf |
| Spiller Address: | 56 CULVER ST |
| Spiller County: | 999 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 541482 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 7/2/19 Called and left message with caller. Waiting for callback. dw 10/23/19: UST removed by Barrier, contaminated soil was found. See Spill 1907273 for all updates. NFA this TTF Spill. jod |

**BATISTA - TTF (Continued)** **S124518448**

Remarks: leaking tank clean up is pending

All Materials:

| | |
|---|---|
| Site ID: | 591337 |
| Operable Unit ID: | 1338959 |
| Operable Unit: | 01 |
| Material ID: | 2348488 |
| Material Code: | 0066A |
| Material Name: | unknown petroleum |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**E35** **APARTMENT BUILDING** **NY AST** **A100269521**
**South** **163 RADFORD STREET** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.084 mi.**
**445 ft.** **Site 3 of 11 in cluster E**

**Relative:**
**Higher**

**Actual:**
**64 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | APARTMENT BUILDING |
| Address: | 163 RADFORD STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-801190 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | L.S.A. Realty |
| Owner Name: | L.S.A. Realty Corp. |
| Owner Street: | P. O. Box 931 |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yorktown Heights, NY 10598 |
| | |
| Tank Number: | 01 |
| Status: | 1. In-Service |
| Date Installation: | 06/01/1975 |
| Capacity: | 3000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 6. Aboveground in subterranean vault with access for inspections |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 2. Vault (w/ access) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

**E36** **167-171 RADFORD STREET** **NY AST** **A100276560**
**South** **167-171 RADFORD STREET** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.086 mi.**
**453 ft.** **Site 4 of 11 in cluster E**

**Relative:**
**Higher**

**Actual:**
**64 ft.**

AST:

| | |
|---|---|
| Name: | 167-171 RADFORD STREET |
| Address: | 167-171 RADFORD STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| Region: | STATE |
| DEC Region: | 2 |
| Site Status: | Unregulated/Closed |
| Facility Id: | 2-603513 |
| Program Type: | PBS |
| UTM X: | 592566.16762 |
| UTM Y: | 4530240.60383 |
| Expiration Date: | N/A |
| Site Type: | Unknown |

Affiliation Records:

| | |
|---|---|
| Site Id: | 25429 |
| Affiliation Type: | Facility Owner |
| Company Name: | JEROME WARENBERG-RECEIVER |
| Contact Type: | Not reported |
| Contact Name: | Not reported |
| Address1: | 1046 MCLEAN AVENUE |
| Address2: | Not reported |
| City: | YONKERS |
| State: | NY |
| Zip Code: | 10704 |
| Country Code: | 001 |
| Phone: | (914) 237-0600 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | TRANSLAT |
| Date Last Modified: | 2004-03-04 |

| | |
|---|---|
| Site Id: | 25429 |
| Affiliation Type: | Mail Contact |
| Company Name: | NORWAX ASSICIATE, INC. |
| Contact Type: | Not reported |
| Contact Name: | Not reported |
| Address1: | 1046 MCLEAN AVENUE |
| Address2: | Not reported |
| City: | YONKERS |
| State: | NY |
| Zip Code: | 10704 |
| Country Code: | 001 |
| Phone: | (914) 237-0600 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | TRANSLAT |
| Date Last Modified: | 2004-03-04 |

| | |
|---|---|
| Site Id: | 25429 |
| Affiliation Type: | Facility Operator |
| Company Name: | 167-171 RADFORD STREET |
| Contact Type: | Not reported |
| Contact Name: | EDDIE GOMEZ |

**167-171 RADFORD STREET (Continued)** **A100276560**

| | |
|---|---|
| Address1: | Not reported |
| Address2: | Not reported |
| City: | Not reported |
| State: | NN |
| Zip Code: | Not reported |
| Country Code: | 001 |
| Phone: | (914) 232-0600 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | TRANSLAT |
| Date Last Modified: | 2004-03-04 |

| | |
|---|---|
| Site Id: | 25429 |
| Affiliation Type: | Emergency Contact |
| Company Name: | JEROME WARENBERG-RECEIVER |
| Contact Type: | Not reported |
| Contact Name: | CARLOS RAMIREZ |
| Address1: | Not reported |
| Address2: | Not reported |
| City: | Not reported |
| State: | NN |
| Zip Code: | Not reported |
| Country Code: | 001 |
| Phone: | (914) 237-0600 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | TRANSLAT |
| Date Last Modified: | 2004-03-04 |

Tank Info:

| | |
|---|---|
| Tank Number: | 001 |
| Tank Id: | 54610 |
| Material Code: | 0001 |
| Common Name of Substance: | #2 Fuel Oil (On-Site Consumption) |

Equipment Records:

| | |
|---|---|
| | B00 - Tank External Protection - None |
| | F00 - Pipe External Protection - None |
| | I05 - Overfill - Vent Whistle |
| | J02 - Dispenser - Suction Dispenser |
| | C01 - Pipe Location - Aboveground |
| | A00 - Tank Internal Protection - None |
| | D01 - Pipe Type - Steel/Carbon Steel/Iron |
| | G03 - Tank Secondary Containment - Vault (w/o access) |
| | H00 - Tank Leak Detection - None |
| Tank Location: | Aboveground - on saddles, legs, racks, etc.... Tank bottom is elevated above grade or tank pad, allowing visual inspection. |
| Tank Type: | Steel/Carbon Steel/Iron |
| Tank Status: | Tank Converted to Non-Regulated Use |
| Pipe Model: | Not reported |
| Install Date: | Not reported |
| Capacity Gallons: | 4000 |
| Tightness Test Method: | NN |
| Date Test: | Not reported |
| Next Test Date: | Not reported |

**167-171 RADFORD STREET (Continued)** **A100276560**

| | |
|---|---|
| Date Tank Closed: | 05/01/1999 |
| Register: | True |
| Modified By: | MJGRIFFI |
| Last Modified: | 05/09/2022 |
| Material Name: | #2 fuel oil (on-site consumption) |

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | 280 DOBBS FERRY ROAD GEM LLC |
| Address: | 167-171 RADFORD STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-800574 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | George Nukho |
| Owner Name: | 280 Dobbs Ferry Road GEM LLC |
| Owner Street: | 573 South Broadway |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10705 |
| Tank Number: | 001 |
| Status: | 1. In-Service |
| Date Installation: | 01/01/1970 |
| Capacity: | 4000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 1. Aboveground |
| Piping Type: | 10. Copper |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 5. Vent Whistle |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

---

**E37** **PRIVATE RESIDENCE** **NY Spills** **S102154101**
**South** **159 RADFORD STREET** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.086 mi.**
**453 ft.** **Site 5 of 11 in cluster E**

**Relative:**
**Higher**

**Actual:**
**67 ft.**

SPILLS:

| | |
|---|---|
| Name: | PRIVATE RESIDENCE |
| Address: | 159 RADFORD STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| Spill Number/Closed Date: | 9007911 / 1990-11-26 |
| Facility ID: | 9007911 |
| Facility Type: | ER |
| DER Facility ID: | 196390 |
| Site ID: | 238578 |
| DEC Region: | 3 |

**PRIVATE RESIDENCE (Continued)** **S102154101**

| | |
|---|---|
| Spill Cause: | Unknown |
| Spill Class: | Not reported |
| SWIS: | 6000 |
| Spill Date: | 1990-10-19 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1990-10-19 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Private Dwelling |
| Spill Notifier: | Fire Department |
| Cleanup Ceased: | 1990-11-07 |
| Cleanup Meets Std: | True |
| Last Inspection: | 1990-11-07 |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1990-10-30 |
| Spill Record Last Update: | 1990-11-26 |
| Spiller Name: | Not reported |
| Spiller Company: | BLUE RIDGE OIL CO. |
| Spiller Address: | Not reported |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | 40.9179820 |
| Longitude: | -73.9005010 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | OWNER CALLED OIL CO. FOR CLEAN UP FIRE CREW COMING BACK NOTED OIL SPILLED ON STREET SPRAYED ON SIDEWALK AND HOUSE OWNER OF HOUSE NOT AT HOMEAT TIME NO INFO AT THIS TIME WILL CALL BACK |

All Materials:

| | |
|---|---|
| Site ID: | 238578 |
| Operable Unit ID: | 945135 |
| Operable Unit: | 01 |
| Material ID: | 431745 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 20.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**E38** **159 RADFORD LLC** **NY AST** **A100359853**
**South** **159 RADFORD STREET** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.086 mi.**
**453 ft.** **Site 6 of 11 in cluster E**

**Relative:** **Higher**

**Actual:** **67 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | 159 RADFORD LLC |
| Address: | 159 RADFORD STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-180068 |

**159 RADFORD LLC (Continued)** **A100359853**

| | |
|---|---|
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Jose Garrido |
| Owner Name: | 159 Radford LLC |
| Owner Street: | 720 White Plains Road |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Scarsdale, NY 10583 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 06/01/1991 |
| Capacity: | 5000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 6. Aboveground in subterranean vault with access for inspections |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Leak Detection: | 2. Manual Interstitial Monitoring |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 1. Float Vent Valve |
| Spill Prevention: | 0. None |
| Dispenser: | 3. Gravity |

---

**I39** **145 RS LLC** **NY AST** **A100445934**
**SSE** **145 RADFORD STREET** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.095 mi.**
**504 ft.** **Site 1 of 5 in cluster I**

**Relative:**
**Higher**

**Actual:**
**73 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | 145 RS LLC |
| Address: | 145 RADFORD STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-802157 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | 145 RS LLC |
| Owner Name: | 145 RS LLC |
| Owner Street: | 573 South Broadway |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10705 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 01/01/1970 |
| Capacity: | 2000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |

**145 RS LLC (Continued)** **A100445934**

| | |
|---|---|
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 6. Impervious Barrier/Concrete Pad (Aboveground Only),ANNUAL TIGHTNESS TESTING |
| Tank Secondary Containment: | 1. Diking (aboveground only),10. Impervious Underlayment (AST Only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 1. Painted/Asphalt Coating |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 1. Diking (aboveground only) |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | 0. None |
| Dispenser: | Not reported |

---

**E40** **MANHOLE 450** **NY Spills** **S104788254**
**SSW** **RADFORD ST / SO. BROADWAY** **N/A**
**< 1/8** **YONKERS, NY**
**0.096 mi.**
**505 ft.** **Site 7 of 11 in cluster E**

**Relative:** **Higher**

**Actual:** **65 ft.**

SPILLS:

| | |
|---|---|
| Name: | MANHOLE 450 |
| Address: | RADFORD ST / SO. BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0005617 / 2004-10-22 |
| Facility ID: | 0005617 |
| Facility Type: | ER |
| DER Facility ID: | 59430 |
| Site ID: | 60965 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Not reported |
| SWIS: | 6018 |
| Spill Date: | 2000-08-10 |
| Investigator: | WXWADSWO |
| Referred To: | Not reported |
| Reported to Dept: | 2000-08-10 |
| CID: | 312 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2000-08-10 |
| Spill Record Last Update: | 2004-10-22 |
| Spiller Name: | Not reported |
| Spiller Company: | CON EDISON |
| Spiller Address: | 4 IRVING PLACE |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Latitude: | 40.9180649 |
| Longitude: | -73.9014950 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was WADSWORTH |
| Remarks: | 1QT IN MANHOLE - CONTAINED - CASE #132817 |

**MANHOLE 450 (Continued)** **S104788254**

All Materials:

| | |
|---|---|
| Site ID: | 60965 |
| Operable Unit ID: | 828178 |
| Operable Unit: | 01 |
| Material ID: | 546767 |
| Material Code: | 0541A |
| Material Name: | dielectric fluid |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 1.00 |
| Units: | G |
| Recovered: | 1.00 |
| Oxygenate: | Not reported |

---

**E41** **14 BAYLEY ASSOCIATES LLC** **NY UST** **U004370214**
**SW** **14 BAYLEY AVENUE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.096 mi.**
**509 ft.** **Site 8 of 11 in cluster E**

**Relative:**
**Higher**

**Actual:**
**73 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | 14 BAYLEY ASSOCIATES LLC |
| Address: | 14 BAYLEY AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-801788 / Unregulated |
| Operator Name: | John Fadduto |
| Owner Name: | 14 Bayley Associates LLC |
| Owner Street: | 1250 Central Park Avenue |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10704 |
| GDS Number: | Not reported |
| | |
| Tank Number: | #1 |
| Status: | 3. Closed - Removed |
| Capacity: | 2000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | 0 |
| Tank Leak Detection: | 5. In-Tank System (auto tank gauge) |
| Date Installation: | 01/03/1955 |
| Date Perm Closure: | 10/02/2010 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 3. Aboveground/underground combination |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 5. Vent Whistle |
| Piping Secondary Containment: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

**E42** **PC PLUMBING** **NY Spills** **S112227056**
**SW** **14 BAYLEY AVE** **N/A**
**< 1/8** **YONKERS, NY**
**0.096 mi.**
**509 ft.** **Site 9 of 11 in cluster E**

**Relative:** **Higher**
**Actual:** **73 ft.**

SPILLS:

| | |
|---|---|
| Name: | PC PLUMBING |
| Address: | 14 BAYLEY AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1206527 / 2012-10-25 |
| Facility ID: | 1206527 |
| Facility Type: | ER |
| DER Facility ID: | 423836 |
| Site ID: | 469530 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2012-10-02 |
| Investigator: | jbodee |
| Referred To: | WCHD- PBS SITE |
| Reported to Dept: | 2012-10-02 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2012-10-02 |
| Spill Record Last Update: | 2012-10-25 |
| Spiller Name: | JENNIE JACOBSEN |
| Spiller Company: | PC PLUMBING |
| Spiller Address: | 14 BAYLEY AVE |
| Spiller Company: | 999 |
| Contact Name: | JENNIE JACOBSEN |
| Latitude: | 40.9182899 |
| Longitude: | -73.9024062 |
| DEC Memo: | Left message for Castlton to call back to duty desk. DT Call back from Castlton. They report holes found in tank but little evidence of impact. Soil samples taken; cleanup pending sample results. WCHD was on site as well as Yonkers FD for inspection. DT 10/25/12: Update from WCDoH: >>> Bimonte, Sebastian >spb4@westchestergov.com> 10/25/12 9:19 AM >>> NFA: 1206527 PBS 3-801788 14 Bayley Avenue Yonkers NY Tank removal, closure report received and reviewed. Soil sample results below standards for clean up. Most of the results were non detect. Spill number called in by Castlton as part of their SOP for tank pulls. No staining or odor at time of pull. *Based upon information received, no further action is required at this time. jod |
| Remarks: | tank removal, c/u pending |

**PC PLUMBING (Continued)** **S112227056**

All Materials:

| | |
|---|---|
| Site ID: | 469530 |
| Operable Unit ID: | 1219423 |
| Operable Unit: | 01 |
| Material ID: | 2217926 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**E43** **RED CAP DRIVE IN CLEANERS INC** **EDR Hist Cleaner** **1020072610**
**SSW** **417 RIVERDALE AVE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.096 mi.**
**509 ft.** **Site 10 of 11 in cluster E**

**Relative:** EDR Hist Cleaner
**Higher**

**Actual:** **70 ft.**

| Year: | Name: | Type: |
|---|---|---|
| 1969 | RED CAP DRIVE IN CLEANERS INC | Drycleaning Plants, Except Rugs |
| 1970 | RED CAP DRIVE IN CLEANERS INC | Drycleaning Plants, Except Rugs |
| 1971 | RED CAP DRIVE IN CLEANERS INC | Drycleaning Plants, Except Rugs |

---

**H44** **CON ED** **NY MANIFEST** **S118462742**
**ESE** **42 CLIFF AVE & RADFORD ST N OF** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.097 mi.**
**513 ft.** **Site 2 of 7 in cluster H**

**Relative:** NY MANIFEST:
**Higher**

**Actual:** **103 ft.**

| | |
|---|---|
| EPA ID: | NYP004839894 |
| Country: | USA |
| Name: | Con Ed |
| Address: | 42 CLIFF AVE & RADFORD ST N OF |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | 42 CLIFF AVE FO |
| Location Address 2: | SB 1208 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Ed |
| Mailing Contact: | Tom Teeling |
| Mailing Address 1: | 4 IRVING PLACE - 15TH FLOOR |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |

**CON ED (Continued)** **S118462742**

Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 09/17/2015
Trans1 Recv Date: 09/17/2015
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/23/2015
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004839894
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 014454346JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Not reported
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Lead
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 25
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

**H45** **CON EDISON** **RCRA NonGen / NLR** **1018277508**
**ESE** **42 CLIFF AVE & RADFORD ST N OF** **FINDS** **NYP004722369**
**< 1/8** **YONKERS, NY 10705** **ECHO**
**0.097 mi.**
**513 ft.** **Site 3 of 7 in cluster H**

**Relative:** **Higher**
**Actual:** **103 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20150131 |
| Handler Name: | | Con Edison |
| Handler Address: | | Radford St & Cliff Ave |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYP004722369 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |

**CON EDISON (Continued)** **1018277508**

| | |
|---|---|
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160502 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20150131 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20150131 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

**CON EDISON (Continued)** **1018277508**

FINDS:
Registry ID: 110067689415

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1018277508
Registry ID: 110067689415

DFR URL:
Name: CON EDISON
Address: 42 Cliff Ave & Radford St N Of
City,State,Zip: YONKERS, NY 10705

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**H46** **CON EDISON** **NJ MANIFEST** **S120676815**
**ESE** **42 CLIFF AVE & RADFORD ST N OF** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.097 mi.**
**513 ft.** **Site 4 of 7 in cluster H**

**Relative:**
**Higher**

**Actual:**
**103 ft.**

NJ MANIFEST:
EPA ID: NYP004839894
Name: CON EDISON
Address: 42 CLIFF AVE & RADFORD ST N OF
City,State,Zip: YONKERS, NY 10705
County: Not reported
Mailing Address: IRVING PL 15TH FL NE
Mailing City,State,Zip: NEW YORK, NY 10003
Telephone: Not reported
Emergency Telephone: Not reported
Contact: THOMAS TEELING
Comments: Not reported
SIC Code: Not reported
County: NY119
Municipal: Not reported
Previous EPAID: Not reported
Generator Flag: Not reported
Transporter Flag: Not reported
TSDF Flag: Not reported
Name Change: Not reported
Date Change: Not reported

Manifest Data:
EPA ID: NYP004839894
Manifest Number: 014454346JJK
Date Shipped: 9/17/2015
TSDF EPA ID: NJD002200046
Transporter EPA ID: NYD006982359
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported

**CON EDISON (Continued)** **S120676815**

| | |
|---|---|
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

| | |
|---|---|
| EPA ID: | NYP004839894 |
| Manifest Number: | 002832909GBF |
| Date Shipped: | 12/24/2015 |
| TSDF EPA ID: | NJD991291105 |
| Transporter EPA ID: | NJD003812047 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |

**CON EDISON (Continued)** **S120676815**

| | |
|---|---|
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

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**H47** **CON EDISON** **RCRA NonGen / NLR** **1019907920**
**ESE** **42 CLIFF AVE & RADFORD ST N OF** **NYP004839894**
**< 1/8** **YONKERS, NY 10705**
**0.097 mi.**
**513 ft.** **Site 5 of 7 in cluster H**

**Relative:** **Higher**

**Actual:** **103 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20150917 |
| Handler Name: | | Con Edison |
| Handler Address: | | Cliff Ave & Radford St N Of |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYP004839894 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |

**CON EDISON (Continued)** **1019907920**

| | |
|---|---|
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160909 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20150917 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20150917 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |

**CON EDISON (Continued)** **1019907920**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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**J48** **ACCURATE PLASTICS** **NY LTANKS** **S110140518**
**NE** **18 MORRIS PALCE** **N/A**
**< 1/8** **YONKERS, NY**
**0.099 mi.**
**525 ft.** **Site 1 of 10 in cluster J**

**Relative:**
**Higher**

**Actual:**
**76 ft.**

LTANKS:

| | |
|---|---|
| Name: | ACCURATE PLASTICS |
| Address: | 18 MORRIS PALCE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0909488 / 2010-03-30 |
| Facility ID: | 0909488 |
| Site ID: | 422194 |
| Spill Date: | 2009-11-24 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | WCDOH |
| Reported to Dept: | 2009-11-24 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2009-11-24 |
| Spill Record Last Update: | 2010-03-30 |
| Spiller Name: | Not reported |
| Spiller Company: | TANK TEST FAILURE |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | CALLER |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 371145 |
| Latitude: | Not reported |
| Longitude: | Not reported |

**ACCURATE PLASTICS (Continued)** **S110140518**

DEC Memo: 11/25/09 caller unavailable to get update...mm 3/30/10: As per Wayne Schneider: 0909488: 18 Morris Ave, Yonkers- ttf 11/24/09, passed retest 11/25/09. NFA jod
Remarks: Tank Test Failure.

All Materials:
Site ID: 422194
Operable Unit ID: 1178044
Operable Unit: 01
Material ID: 2170950
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: G
Recovered: Not reported
Oxygenate: Not reported

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**J49** **ACCURATE PLASTICS INC** **PFAS ECHO** **1027321104**
**NE** **18 MORRIS PLACE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.099 mi.**
**525 ft.** **Site 2 of 10 in cluster J**

**Relative:**
**Higher**

**Actual:**
**76 ft.**

PFAS ECHO:
Facility ID: 110019802766
Name: Accurate Plastics Inc
Address: 18 MORRIS PLACE
City,State,Zip: YONKERS, NY 10705
Latitude: 40.92097
Longitude: -73.89867
Count: 1
County: WESTCHESTER
Status: Active
Region: 02
Industry: Plastics and Resins

ECHO Facility Report:
Facility Percent Minority: 63.992
Facility Derived Tribes: -
Facility Population: 12232.49
EPA Programs: CAA
Federal Facility: No
Federal Agency: -
Facility FIPS Code: 36119
Facility Indian Country Flag: N
Facility Collection Method: ADDRESS MATCHING-HOUSE NUMBER
Facility Derived HUC: 02030101
Facility Derived WBD: 020301010404
Facility Derived CD113: 16
Facility Derived CB2010: 361190002013006
Facility Major Flag: -
Facility Active Flag: Y
Facility Inspection Count: 0
Facility Date Last Inspection: -
Facility Days Last Inspection: -

**ACCURATE PLASTICS INC (Continued)** **1027321104**

| | |
|---|---|
| Facility Informal Count: | 0 |
| Facility Date Last Informal Action: | - |
| Facility Formal Action Count: | 0 |
| Facility Date Last Formal Action: | - |
| Facility Total Penalties: | 0 |
| Facility Penalty Count: | - |
| Facility Date Last Penalty: | - |
| Facility Last Penalty AMT: | 0 |
| Facility QTRS With NC: | 0 |
| Facility Programs With SNC: | 0 |
| Facility Compliance Status: | No Violation Identified |
| Facility SNC Flag: | N |
| AIR Flag: | Y |
| NPDES Flag: | N |
| SDWIS Flag: | N |
| RCRA Flag: | N |
| TRI Flag: | N |
| GHG Flag: | N |
| AIR IDS: | NY0000003551800547 |
| CAA Permit Types: | Minor Emissions |
| CAA NAICS: | 999999 |
| CAA SICS: | 3083 |
| NPDES IDS: | - |
| CWA Permit Types: | - |
| CWA NAICS: | - |
| CWA SICS: | - |
| RCRA IDS: | - |
| RCRA Permit Types: | - |
| RCRA NAICS: | - |
| SDWA IDS: | - |
| SDWA System Types: | - |
| SDWA Compliance Status: | - |
| SDWA SNC Flag: | N |
| TRI IDS: | - |
| TRI Releases Transfers: | - |
| TRI On Site Releases: | - |
| TRI Off Site Transfers: | - |
| TRI Reporter: | - |
| Facility IMP Water Flag: | - |

---

**J50** **ACCURATE PLASTICS, INC.** **NY UST** **U004439320**
**NE** **18 MORRIS PLACE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.099 mi.**
**525 ft.** **Site 3 of 10 in cluster J**

**Relative:** **Higher**
**Actual:** **76 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | ACCURATE PLASTICS, INC. |
| Address: | 18 MORRIS PLACE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-800432 / Active |
| Operator Name: | Ana Brito |
| Owner Name: | Accurate Plastics, Inc. |
| Owner Street: | 18 Morris Place |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10705 |

**ACCURATE PLASTICS, INC. (Continued)** **U004439320**

| | |
|---|---|
| GDS Number: | Not reported |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Capacity: | 10000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | 0 |
| Tank Leak Detection: | 0. None |
| Date Installation: | 04/01/1985 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 1. Epoxy liner |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 3. Aboveground/Underground Combination |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**J51** **ACCURATE PLASTICS INC.** **NY Spills** **S128910846**
**NE** **18 MORRIS PLACE (AKA 14 MORRIS)** **N/A**
**< 1/8** **YONKERS, NY**
**0.099 mi.**
**525 ft.** **Site 4 of 10 in cluster J**

**Relative:** **Higher**
**Actual:** **76 ft.**

SPILLS:

| | |
|---|---|
| Name: | ACCURATE PLASTICS INC. |
| Address: | 18 MORRIS PLACE (AKA 14 MORRIS) |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 2109571 / 2022-07-20 |
| Facility ID: | 2109571 |
| Facility Type: | ER |
| DER Facility ID: | 578531 |
| Site ID: | 631590 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2022-02-09 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2022-02-09 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Non Major Facility > 1,100 gal |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2022-02-09 |
| Spill Record Last Update: | 2022-07-20 |

**ACCURATE PLASTICS INC. (Continued)** **S128910846**

| | |
|---|---|
| Spiller Name: | ANGELA DISTASI |
| Spiller Company: | ANGELA DISTASI |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | ANGELA DISTASI |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 2/9/22 During Phase 1 C2G found an empty and sealed UST 10000 #2 fuel oil tank. Tank was installed in the 80s and is out of service and empty. PBS # 3-800432. During GEO probe today, around 9 ft down they got a reading of 160 PID. Amount and duration of spill is unknown. Area on public sewer and water. GW encountered. Property is currently vacant. May have been site of warehouse / auto shop in the past. C2G is waiting on property owner to determine see if she is going to hire them for cleanup. Angela Distasi 914-673-0815 is the property owner. ET 2/18/2022: WCDOH PBS data lists this registration as Accurate Plastics, Inc., 18 Morris Place. jod 05/24/22 Emailed WCHD to inquire if they have info about the removal of the tank. William Eilbacher emailed that the 10 K #2 FO tank was removed on May 18. Holes were noted in the tank by William. TG 07/20/22 William Eilbacher forwarded a Tank Closure Report prepared by C2G Environmental Consultants and submitted to the WCHD. C2G reported that they removed a 10,000 gallon AST along with 14.20 tons of contaminated soil from beneath the tank. All 10 soil samples were below NYSDEC soil Guidance Values. NFA. TG |
| Remarks: | spill outside, GEO probe investigation. 10000g tank. tank out of service and empty |

All Materials:

| | |
|---|---|
| Site ID: | 631590 |
| Operable Unit ID: | 1378677 |
| Operable Unit: | 01 |
| Material ID: | 2392469 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

**F52** **RESIDENTIAL TTF** **NY LTANKS** **S108298820**
**East** **38 POST STREET** **N/A**
**< 1/8** **YONKERS, NY**
**0.100 mi.**
**528 ft.** **Site 2 of 5 in cluster F**

**Relative:** **Higher**

**Actual:** **80 ft.**

LTANKS:

| | |
|---|---|
| Name: | RESIDENTIAL TTF |
| Address: | 38 POST STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0609234 / 2012-08-17 |
| Facility ID: | 0609234 |
| Site ID: | 373385 |
| Spill Date: | 2006-11-07 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D5 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2006-11-10 |
| CID: | 408 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2006-11-10 |
| Spill Record Last Update: | 2024-07-03 |
| Spiller Name: | JOHN BIONBI |
| Spiller Company: | PRIVATE HOME |
| Spiller Address: | 38 POST STREET |
| Spiller County: | 001 |
| Spiller Contact: | JOHN BIONBI |
| Spiller Phone: | (914) 391-2545 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 323104 |
| Latitude: | 40.9199817 |
| Longitude: | -73.8981486 |
| DEC Memo: | 8/2/10 Homeowner TTF JO'M 8/17/12 Homeomer TTF greater then 5 years old and no indications of contamination will be closed. This was done with consultations between Albany and the Region. NFA JO'M |
| Remarks: | SOIL TEST; |

All TTF:

| | |
|---|---|
| Facility ID: | 0609234 |
| Spill Number: | 0609234 |
| Spill Tank Test: | 1550432 |
| Site ID: | 373385 |
| Tank Number: | 1 |
| Tank Size: | 550 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |

**RESIDENTIAL TTF (Continued)** **S108298820**

Test Method: 00
Test Method 2: Unknown
Leak Rate: .00
Gross Fail: Not reported
Modified By: Watchdog
Last Modified Date: Not reported

All Materials:
Site ID: 373385
Operable Unit ID: 1131092
Operable Unit: 01
Material ID: 2120782
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G
Recovered: .00
Oxygenate: Not reported

---

**G53** **YONKERS PUBLIC SCHOOL** **NY Spills** **S109063248**
**West** **350 HAWTHORNE AVE** **N/A**
**< 1/8** **YONKERS, NY**
**0.101 mi.**
**531 ft.** **Site 6 of 6 in cluster G**

**Relative:** **Lower**

**Actual:** **47 ft.**

SPILLS:
Name: YONKERS PUBLIC SCHOOL
Address: 350 HAWTHORNE AVE
City,State,Zip: YONKERS, NY
Spill Number/Closed Date: 2204300 / 2022-09-09
Facility ID: 2204300
Facility Type: ER
DER Facility ID: 347667
Site ID: 640442
DEC Region: 3
Spill Cause: Unknown
Spill Class: B1
SWIS: 6018
Spill Date: 2022-08-02
Investigator: TDGHIOSA
Referred To: Not reported
Reported to Dept: 2022-08-16
CID: Not reported
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Local Agency
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 2022-08-16
Spill Record Last Update: 2022-09-09

**YONKERS PUBLIC SCHOOL (Continued)** **S109063248**

| | |
|---|---|
| Spiller Name: | Not reported |
| Spiller Company: | UNKNOWN |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | JACK EISENBACH |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 8/16/22 following removal of slab in the boiler room of the school impacted soils were encountered during trenching activities. The caller indicates that this is an older spill as there has been no tank in that area for decades but the spill was built in 1928. The caller indicated he had collected soil samples from the walls and GW in the trenches but has not submitted anything outside of disposal samples to the laboratory. At this time remedial activities have been limited to the trenches. BW 08/17/22 Met with Jack Eisenbach from Eisenbach & Ruhnke Engineering PC. We inspected the ongoing trenching work for the installation of new blowdown drains in the boiler room where re4 boilers are located. There is concern that the sub slab soils are impacted with oil. There appeared to be a significant accumulation of iron bacteria and bio sheen on the surface of the gw slowly flowing through the trenches. Jack Eisenbach has soil samples which will be sent to a lab for CP-51 sampling. A groundwater sample from the trenches will also be collected and analyzed for VOCs. The trenches were also screened with a PID meter and all the reading were below 3 ppm. TG 09/01/22 Soil samples from each of the piles showed that all VOC were ND and only low levels fo SVOCs were detected. The soil was drummed (18 +2sorbents in total) and transported by Luzon Env. NFA. TG |
| Remarks: | Dug up concrete slab in boil room and found contaminated soil unknown spill, unknown source or date of spill |

All Materials:

| | |
|---|---|
| Site ID: | 640442 |
| Operable Unit ID: | 1387483 |
| Operable Unit: | 01 |
| Material ID: | 2402407 |
| Material Code: | 0066A |
| Material Name: | unknown petroleum |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | YONKERS SCHOOL |
| Address: | 350 HAWTHORNE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0802209 / Not Reported |
| Facility ID: | 0802209 |

**YONKERS PUBLIC SCHOOL (Continued)** **S109063248**

| | |
|---|---|
| Facility Type: | ER |
| DER Facility ID: | 347667 |
| Site ID: | 398303 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | B1 |
| SWIS: | 6018 |
| Spill Date: | 2008-05-27 |
| Investigator: | RDBENDEL |
| Referred To: | Not reported |
| Reported to Dept: | 2008-05-27 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | Not reported |
| Remediation Phase: | 4 |
| Date Entered In Computer: | 2008-05-27 |
| Spill Record Last Update: | 2023-01-13 |
| Spiller Name: | BOB FLATH |
| Spiller Company: | SCHOOL |
| Spiller Address: | 350 HAWTHORNE AVE |
| Spiller Company: | 001 |
| Contact Name: | BOB FLATH |
| Latitude: | 40.9201600 |
| Longitude: | -73.9031640 |
| DEC Memo: | PBS 3-413534 05/27/08 Bill Canavan reported mild odors entering around a pipeline. Two gas stations nearby. More subsurface investigation planned. Report submission to DEC to follow. TG 1-13-16 emailed the 8 open spills to Jennifer Hubbard At Yonkers School District, Sr. Project Manager, School Facilities Management Dept; One Larkin Center Yonkers, NY 10701; Phone 914.376.8008_ RDB 1-13-16 Response, I ll look into them. The others I found online and have contacted all involved parties to collect the documents necessary to process the closure. IN some cases the engineer or contractor has forwarded the information to WCDOH for handling but I asked them to confirm with WCDOH recipient the receipt and status. RDB 01/13/2023 HydroEnvironmental Subsurface Evaluation and Indoor air sampling report dated May22 2008 entered into DecDocs. TG |
| Remarks: | FOUND DURING SOIL BORINGS- COULD BE FROM AN OLD GAS STATION ACCROSS THE STREET |

All Materials:

| | |
|---|---|
| Site ID: | 398303 |
| Operable Unit ID: | 1155195 |
| Operable Unit: | 01 |
| Material ID: | 2146056 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |

**YONKERS PUBLIC SCHOOL (Continued)** **S109063248**

| | |
|---|---|
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**H54** **SPILL NUMBER 9812660** **NY LTANKS** **S104619926**
**SSE** **150 LIVINGSTON AVE** **N/A**
**< 1/8** **YONKERS, NY**
**0.101 mi.**
**533 ft.** **Site 6 of 7 in cluster H**

**Relative:**
**Higher**

**Actual:**
**78 ft.**

LTANKS:

| | |
|---|---|
| Name: | SPILL NUMBER 9812660 |
| Address: | 150 LIVINGSTON AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9812660 / 1999-05-10 |
| Facility ID: | 9812660 |
| Site ID: | 271726 |
| Spill Date: | 1999-01-13 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | WCHD |
| Referred To: | Westchester Cnty Health Dept |
| Reported to Dept: | 1999-01-13 |
| CID: | 233 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1999-01-13 |
| Spill Record Last Update: | 1999-06-01 |
| Spiller Name: | BENNY RESTIFO |
| Spiller Company: | APT BUILDING. |
| Spiller Address: | 150 LIVINGSTON AVE |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 221141 |
| Latitude: | 40.9182157 |
| Longitude: | -73.8997359 |
| DEC Memo: | Not reported |
| Remarks: | ABOVE GROUND TANK IN BASEMENT NO SIGN OF LEAKAGE WILL ISOLATE AND RETEST TOMMARROW |

All TTF:

| | |
|---|---|
| Facility ID: | 9812660 |
| Spill Number: | 9812660 |
| Spill Tank Test: | 1546744 |

**SPILL NUMBER 9812660 (Continued)** **S104619926**

| | |
|---|---|
| Site ID: | 271726 |
| Tank Number: | Not reported |
| Tank Size: | 3000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | F |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 271726 |
| Operable Unit ID: | 1069909 |
| Operable Unit: | 01 |
| Material ID: | 312935 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**E55** **REAL ESTATE TTF** **NY LTANKS** **S106123956**
**South** **1 GRAY PLACE** **N/A**
**< 1/8** **YONKERS, NY**
**0.102 mi.**
**541 ft.** **Site 11 of 11 in cluster E**

**Relative:**
**Higher**

**Actual:**
**68 ft.**

LTANKS:

| | |
|---|---|
| Name: | REAL ESTATE TTF |
| Address: | 1 GRAY PLACE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0311498 / 2012-08-13 |
| Facility ID: | 0311498 |
| Site ID: | 153615 |
| Spill Date: | 2004-01-12 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D5 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2004-01-12 |
| CID: | 403 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |

**REAL ESTATE TTF (Continued)** **S106123956**

| | |
|---|---|
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2004-01-12 |
| Spill Record Last Update: | 2022-03-17 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | PAUL SCORZELLI |
| Spiller Phone: | (914) 946-4300 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 130313 |
| Latitude: | 40.9178642 |
| Longitude: | -73.9006561 |
| DEC Memo: | 7/29/10 Homeowner TTF JO'M 8/13/12 With Albany and regional approval all Homeowner Tank Test Failure with no impact older than 5 years will be closed. NFA JO M |
| Remarks: | TANK TEST FAILURE |

All TTF:

| | |
|---|---|
| Facility ID: | 0311498 |
| Spill Number: | 0311498 |
| Spill Tank Test: | 1528907 |
| Site ID: | 153615 |
| Tank Number: | Not reported |
| Tank Size: | 1000 |
| Material: | Not reported |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

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**F56** **CON EDISON TRANSFORMER MANHOLE 1100** **RCRA NonGen / NLR** **1014918521**
**ENE** **POST ST & HAMILTON AVE** **NYP004221370**
**< 1/8** **YONKERS, NY 10705**
**0.107 mi.**
**566 ft.** **Site 3 of 5 in cluster F**

**Relative:**
**Higher**

**Actual:**
**76 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20110106 |
| Handler Name: | Con Edison Transformer Manhole 1100 |
| Handler Address: | Post St & Hamilton Ave |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYP004221370 |
| Contact Name: | DONALD SENNO |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 914-925-6219 |
| Contact Fax: | Not reported |

**CON EDISON TRANSFORMER MANHOLE 1100 (Continued)** **1014918521**

| | | |
|---|---|---|
| Contact Email: | | Not reported |
| Contact Title: | | SR SPECIALIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL RM 828 |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20110701 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

**CON EDISON TRANSFORMER MANHOLE 1100 (Continued)** **1014918521**

Historic Generators:
- Receive Date: 20101207
- Handler Name: CON EDISON TRANSFORMER MANHOLE 1100
- Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
- State District Owner: Ny
- Large Quantity Handler of Universal Waste: No
- Recognized Trader Importer: No
- Recognized Trader Exporter: No
- Spent Lead Acid Battery Importer: No
- Spent Lead Acid Battery Exporter: No
- Current Record: No
- Non Storage Recycler Activity: Not reported
- Electronic Manifest Broker: Not reported

- Receive Date: 20110106
- Handler Name: CON EDISON TRANSFORMER MANHOLE 1100
- Federal Waste Generator Description: Not a generator, verified
- State District Owner: Ny
- Large Quantity Handler of Universal Waste: No
- Recognized Trader Importer: No
- Recognized Trader Exporter: No
- Spent Lead Acid Battery Importer: No
- Spent Lead Acid Battery Exporter: No
- Current Record: Yes
- Non Storage Recycler Activity: Not reported
- Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
- NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
- Violations: No Violations Found

Evaluation Action Summary:
- Evaluations: No Evaluations Found

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**F57** **CON EDISON** **NY MANIFEST** **S117319142**
**ENE** **W S HAMILTON AVE & POST RD** **N/A**
**< 1/8** **YONKERS, NY**
**0.107 mi.**
**566 ft.** **Site 4 of 5 in cluster F**

**Relative:** **Higher**
**Actual:** **76 ft.**

NY MANIFEST:
- EPA ID: NYP004668042
- Country: USA
- Name: Con Edison
- Address: W S HAMILTON AVE & POST RD
- Address 2: TM 1100
- City,State,Zip: YONKERS, NY
- Zip 4: Not reported
- Location Address 1: W S HAMILTON AVE & POST RD
- Location Address 2: TM 1100
- Location City,State,Zip: YONKERS, NY
- Location Zip 4: Not reported

**CON EDISON (Continued)** **S117319142**

Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Con Edison
Mailing Address 1: 4 IRVING PL 15TH FL
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 09/29/2014
Trans1 Recv Date: 09/29/2014
Trans2 Recv Date: Not reported
TSD Site Recv Date: 10/01/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004668042
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 012770963JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 50
Units: Pounds

**CON EDISON (Continued)** **S117319142**

Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

---

**F58** **TM 1100** **NY Spills** **S104652599**
**ENE** **HAMILTON AVE & POST ST** **N/A**
**< 1/8** **YONKERS, NY**
**0.107 mi.**
**566 ft.** **Site 5 of 5 in cluster F**

**Relative:** **Higher**
**Actual:** **76 ft.**

SPILLS:

| | |
|---|---|
| Name: | TM 1100 |
| Address: | HAMILTON AVE & POST ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0001640 / 2000-05-10 |
| Facility ID: | 0001640 |
| Facility Type: | ER |
| DER Facility ID: | 67321 |
| Site ID: | 71043 |
| DEC Region: | 3 |
| Spill Cause: | Unknown |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 2000-05-09 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2000-05-09 |
| CID: | 211 |
| Water Affected: | Not reported |
| Spill Source: | Unknown |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2000-05-09 |
| Spill Record Last Update: | 2000-05-16 |
| Spiller Name: | Not reported |
| Spiller Company: | UNKNOWN |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | MARK SCHLAGEL |
| Latitude: | 40.9202120 |
| Longitude: | -73.8980560 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'DEE |
| Remarks: | 5 gals poss motor oil on 1000 gals water - sample taken clean up pending results - con ed 131307 |

All Materials:

| | |
|---|---|
| Site ID: | 71043 |
| Operable Unit ID: | 823172 |
| Operable Unit: | 01 |
| Material ID: | 289859 |

**TM 1100 (Continued)** **S104652599**

| | |
|---|---|
| Material Code: | 0066A |
| Material Name: | unknown petroleum |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 5.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**H59** **WALKER - UST** **NY Spills** **S123659294**
**SSE** **63 CLIFF AVE** **N/A**
**< 1/8** **YONKERS, NY**
**0.108 mi.**
**572 ft.** **Site 7 of 7 in cluster H**

**Relative:** **Higher**

**Actual:** **81 ft.**

SPILLS:

| | |
|---|---|
| Name: | WALKER - UST |
| Address: | 63 CLIFF AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1903653 / 2019-12-04 |
| Facility ID: | 1903653 |
| Facility Type: | ER |
| DER Facility ID: | 533004 |
| Site ID: | 591623 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2019-07-10 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2019-07-10 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Private Dwelling |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2019-07-10 |
| Spill Record Last Update: | 2019-12-04 |
| Spiller Name: | REGGIE WALKER |
| Spiller Company: | Reggie Walker |
| Spiller Address: | 63 CLIFF AVE |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 7/10/19 Spoke to caller. The tank was corroded through on the bottom. Groundwater was encountered but no floating product...mm Previous spill number for this UST removal is 1809544. jod 12/4/2019: Innovative Environmental removed the leaking UST and disposed of 12.64 tons of petroleum |

**WALKER - UST (Continued)** **S123659294**

contaminated soil. Post excavation soil sample results were below CP-51 Guidance values. Report has
been reviewed and entered in DecDocs. Based upon the information provided, no further action is
required at this time. jod

Remarks: 1000 underground tank clean up is pending

All Materials:

| | |
|---|---|
| Site ID: | 591623 |
| Operable Unit ID: | 1339236 |
| Operable Unit: | 01 |
| Material ID: | 2348784 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | PHASE II - REAL ESTATE |
| Address: | 63 CLIFF AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1809544 / 2019-10-08 |
| Facility ID: | 1809544 |
| Facility Type: | ER |
| DER Facility ID: | 533004 |
| Site ID: | 580393 |
| DEC Region: | 3 |
| Spill Cause: | Unknown |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2018-11-29 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2018-12-12 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Private Dwelling |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2018-12-12 |
| Spill Record Last Update: | 2019-10-08 |
| Spiller Name: | WALKER |
| Spiller Company: | Walker Residence |
| Spiller Address: | 63 CLIFF AVE. |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 12/12/18 Barrier completed a phase 2 investigation for the property’s |

**WALKER - UST (Continued)** **S123659294**

potential buyer including the
advancement of 1 soil boring, which was completed on November 29, 2018. The laboratory data
indicated that the soils have impacts. Wayne is reaching out through the agents to get the current
owners information to provide them a report of the information. BW 10/08/19: UST was removed by
Innovative Environmental. Tank is leaking and ground water may be impacted. See Spill 1903653 for
updates, NFA this duplicate case number. jod

Remarks: test results show product in soil clean up pending

All Materials:

| | |
|---|---|
| Site ID: | 580393 |
| Operable Unit ID: | 1328106 |
| Operable Unit: | 01 |
| Material ID: | 2337063 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**K60** **COSMETIC CAR CARE INC** **NY Spills** **1004755658**
**North** **320 RIVERDALE AVE** **RCRA NonGen / NLR** **NY0000195263**
**< 1/8** **YONKERS, NY 10705** **US AIRS**
**0.108 mi.** **FINDS**
**572 ft.** **Site 1 of 2 in cluster K** **ECHO**
**NY MANIFEST**
**Relative:** **NJ MANIFEST**
**Higher**

**Actual:** **59 ft.**

SPILLS:

| | |
|---|---|
| Name: | COMMERCIAL LOT |
| Address: | 320 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0902156 / 2009-07-21 |
| Facility ID: | 0902156 |
| Facility Type: | ER |
| DER Facility ID: | 363291 |
| Site ID: | 414191 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 2009-05-22 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2009-05-22 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | |
|---|---|
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2009-05-22 |
| Spill Record Last Update: | 2009-07-21 |
| Spiller Name: | PETER MONACO |
| Spiller Company: | 326 RIVERDALE OWNERS CORP |
| Spiller Address: | 320 RIVERDALE AVE |
| Spiller Company: | 999 |
| Contact Name: | DWAYNE MONACO |
| Latitude: | 40.9214917 |
| Longitude: | -73.9004986 |
| DEC Memo: | 06/04/09 Northeast Environmental reported that they excavated and removed one 750 gallon tank along with 20.31 tons of petroeum contaminated soil. Post excavation TAGM soil sample results were below DEC guidance values. NFA TG |
| Remarks: | REMOVAL OF A 750 GALLON UST SOIL CONTAMINTION WAS FOUND CLEAN UP WAS DONE. |

All Materials:

| | |
|---|---|
| Site ID: | 414191 |
| Operable Unit ID: | 1170581 |
| Operable Unit: | 01 |
| Material ID: | 2162317 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20091221 |
| Handler Name: | Cosmetic Car Care |
| Handler Address: | Riverdale Ave |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NY0000195263 |
| Contact Name: | JON CORTELL |
| Contact Address: | PALMER AVENUE, SUITE 203 |
| Contact City,State,Zip: | LARCHMONT, NY 10538 |
| Contact Telephone: | 845-222-6910 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Not reported |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | | |
|---|---|---|
| State District: | | NYSDEC R3 |
| Mailing Address: | | RIVERDALE AVE |
| Mailing City,State,Zip: | | YONKERS, NY 10705 |
| Owner Name: | Julie K Kane | |
| Owner Type: | | Private |
| Operator Name: | Julie K Kane | |
| Operator Type: | | Private |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20150414 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Hazardous Waste Summary:

| | |
|---|---|
| Waste Code: | D001 |
| Waste Description: | Ignitable Waste |
| Waste Code: | F003 |
| Waste Description: | The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.

Waste Code: F005
Waste Description: The Following Spent Nonhalogenated Solvents: Toluene, Methyl Ethyl Ketone, Carbon Disulfide, Isobutanol, Pyridine, Benzene, 2-Ethoxyethanol, And 2-Nitropropane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Nonhalogenated Solvents Or Those Solvents Listed In F001, F002, Or F004; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: JULIE K KANE | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 23 CANTERBURY RD |
| Owner/Operator City,State,Zip: | WHITE PLAINS, NY 10607 |
| Owner/Operator Telephone: | 914-948-7121 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: JULIE K KANE | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 23 CANTERBURY RD |
| Owner/Operator City,State,Zip: | WHITE PLAINS, NY 10607 |
| Owner/Operator Telephone: | 914-948-7121 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: JULIE K KANE | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 23 CANTERBURY RD |
| Owner/Operator City,State,Zip: | WHITE PLAINS, NY 10607 |
| Owner/Operator Telephone: | 914-948-7121 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: JULIE K KANE | |
| Legal Status: | Private |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | |
|---|---|
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 23 CANTERBURY RD |
| Owner/Operator City,State,Zip: | WHITE PLAINS, NY 10607 |
| Owner/Operator Telephone: | 914-948-7121 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |
| | |
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: JULIE K KANE | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 23 CANTERBURY RD |
| Owner/Operator City,State,Zip: | WHITE PLAINS, NY 10607 |
| Owner/Operator Telephone: | 914-948-7121 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20060101 |
| Handler Name: COSMETIC CAR CARE | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |
| | |
| Receive Date: | 20070101 |
| Handler Name: COSMETIC CAR CARE | |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |
| | |
| Receive Date: | 20091221 |
| Handler Name: COSMETIC CAR CARE | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19940331
Handler Name: COSMETIC CAR CARE
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Has the Facility Received Notices of Violations:
Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported

**COSMETIC CAR CARE INC (Continued)** **1004755658**

Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 20091210
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION
Evaluation Responsible Person Identifier: NYMOC
Evaluation Responsible Sub-Organization: R3
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

US AIRS MINOR:
Envid: 1004755658
Region Code: 02
Programmatic ID: AIR NY0000003551800621
Facility Registry ID: 110004313476
D and B Number: Not reported
Primary SIC Code: 7532
NAICS Code: 811121
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:
Region Code: 02
Programmatic ID: AIR NY0000003551800621
Facility Registry ID: 110004313476
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2004-10-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 02
Programmatic ID: AIR NY0000003551800621
Facility Registry ID: 110004313476
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2008-12-01 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

**COSMETIC CAR CARE INC (Continued)** **1004755658**

FINDS:
Registry ID: 110004313476

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
ICIS-Air (AIR) AIR is the modernization of the Air Facility System (AFS) into the Integrated Compliance Information System (ICIS). AIR contains enforcement, compliance, and permit data for stationary sources of air pollution regulated by the EPA, State, and Local air pollution agencies.
The Air Facility System (AFS) contains compliance and permit data for stationary sources of air pollution regulated by the EPA, state, and local air pollution agencies.
The New York Department of Environmental Conservation Facility Information System (FIS) database houses all information about facilities that are regulated or of environmental interest to the state of New York.
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1004755658
Registry ID: 110004313476

DFR URL:
Name: COSMETIC CAR CARE INC
Address: 320 Riverdale Ave
City,State,Zip: YONKERS, NY 10705

NY MANIFEST:
EPA ID: NY0000195263
Country: USA
Name: Cosmetic Car Care
Address: 320 RIVERDALE AVE
Address 2: Not reported
City,State,Zip: YONKERS, NY 10705
Zip 4: Not reported
Location Address 1: 320 RIVERDALE AVE
Location Address 2: Not reported
Location City,State,Zip: YONKERS, NY 10705
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Cosmetic Car Care
Mailing Contact: S Roy Vassell
Mailing Address 1: 320 RIVERDALE AVE
Mailing Address 2: Not reported

**COSMETIC CAR CARE INC (Continued)** **1004755658**

Mailing City,State,Zip: YONKERS, NY 10705
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 9149631038

Manifest Data:
Document ID: CTF0402560
Manifest Status: Not reported
Trans1 State ID: P207055IL
Year: 1996
Trans2 State ID: Not reported
Generator Ship Date: 02/21/1996
Trans1 Recv Date: 02/21/1996
Trans2 Recv Date: Not reported
TSD Site Recv Date: 02/26/1996
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NY0000195263
Trans1 EPA ID: NJD080631369
Trans2 EPA ID: Not reported
TSDF ID 1: CTD072138969
TSDF ID 2: Not reported
Manifest Tracking Number: Not reported
Import Indicator: Not reported
Export Indicator: Not reported
Discr Quantity Indicator: Not reported
Discr Type Indicator: Not reported
Discr Residue Indicator: Not reported
Discr Partial Reject Indicator: Not reported
Discr Full Reject Indicator: Not reported
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: Not reported
Waste Code 1: The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 00055
Units: Gallons (liquids only)
Number of Containers: 001
Container Type: Cargo tanks (tank trucks)
Handling Method: Burn
Specific Gravity: 01.00

Document ID: MAK0259920

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | |
|---|---|
| Manifest Status: | Not reported |
| Trans1 State ID: | P207061IL |
| Year: | 1998 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 04/09/1998 |
| Trans1 Recv Date: | 04/09/1998 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 04/16/1998 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NY0000195263 |
| Trans1 EPA ID: | NJD080631369 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | MAD053452637 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00055 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | CTF0513606 |
| Manifest Status: | Not reported |
| Trans1 State ID: | P207055IL |
| Year: | 1997 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/27/1997 |
| Trans1 Recv Date: | 01/27/1997 |
| Trans2 Recv Date: | Not reported |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | |
|---|---|
| TSD Site Recv Date: | 01/30/1997 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NY0000195263 |
| Trans1 EPA ID: | NJD080631369 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | CTD072138969 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00159 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | MAM1320590 |
| Manifest Status: | Not reported |
| Trans1 State ID: | P298709IL |
| Year: | 2001 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/24/2001 |
| Trans1 Recv Date: | 01/24/2001 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 01/25/2001 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NY0000195263 |
| Trans1 EPA ID: | NJD080631369 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | MAD053452637 |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | |
|---|---|
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00055 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | MAM1397080 |
| Manifest Status: | Not reported |
| Trans1 State ID: | P298709IL |
| Year: | 2002 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/17/2002 |
| Trans1 Recv Date: | 01/17/2002 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 01/18/2002 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NY0000195263 |
| Trans1 EPA ID: | NJD080631369 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | MAD053452637 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | |
|---|---|
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00035 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD080631369 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 02/04/2008 |
| Trans1 Recv Date: | 02/04/2008 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 02/04/2008 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NY0000195263 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD980536593 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000214229VES |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | |
|---|---|
| | Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code b: | Ignitable Waste |
| Waste Code c: | The Following Spent Nonhalogenated Solvents: Toluene, Methyl Ethyl Ketone, Carbon Disulfide, Isobutanol, Pyridine, Benzene, 2-Ethoxyethanol, And 2-Nitropropane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Nonhalogenated Solvents Or Those Solvents Listed In F001, F002, Or F004; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code e: | Methyl Ethyl Ketone |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 400 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD080631369 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/09/2006 |
| Trans1 Recv Date: | 01/09/2006 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 01/09/2006 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NY0000195263 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD980536593 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | NJA5265120 |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | |
|---|---|
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code a: | The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 400 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | MAK0491230 |
| Manifest Status: | Not reported |
| Trans1 State ID: | P298709IL |
| Year: | 1999 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/26/1999 |
| Trans1 Recv Date: | 01/26/1999 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 01/27/1999 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NY0000195263 |
| Trans1 EPA ID: | NJD080631369 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | MAD053452637 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | |
|---|---|
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00035 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | CTF0354114 |
| Manifest Status: | Not reported |
| Trans1 State ID: | P52018IL |
| Year: | 1994 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 12/15/1994 |
| Trans1 Recv Date: | 12/15/1994 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 12/20/1994 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NY0000195263 |
| Trans1 EPA ID: | ILD099202681 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | CTD072138969 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | |
|---|---|
| | Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00449 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | MAM1116110 |
| Manifest Status: | Not reported |
| Trans1 State ID: | P298709IL |
| Year: | 2000 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/11/2000 |
| Trans1 Recv Date: | 01/11/2000 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 01/14/2000 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NY0000195263 |
| Trans1 EPA ID: | NJD080631369 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | MAD053452637 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Nonhalogenated Solvents: Xylene, Acetone, Ethyl Acetate, Ethyl Benzene, Ethyl Ether, Methyl Isobutyl Ketone, N-Butyl Alcohol, Cyclohexanone, And Methanol; All Spent Solvent Mixtures/Blends Containing, Before Use, Only The Above Spent Nonhalogenated Solvents; And All Spent Solvent Mixtures/Blends Containing, Before Use, One Or More Of The Above Nonhalogenated Solvents, And A Total Of Ten Percent Or More (By Volume) Of One Or More Of Those Solvents Listed In F001, F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | |
|---|---|
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00055 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NY0000195263 |
| Name: | COSMETIC CAR CARE |
| Address: | 320 RIVERDALE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | 320 RIVERDALE AVENUE |
| Mailing City,State,Zip: | YONKERS 10705 |
| Telephone: | 9149631038 |
| Emergency Telephone: | Not reported |
| Contact: | JOHN KANE |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | 00 |
| Municipal: | 00 |
| Previous EPAID: | Not reported |
| Generator Flag: | X |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NY0000195263 |
| Manifest Number: | NJA5265120 |
| Date Shipped: | 01/09/2006 |
| TSDF EPA ID: | NJD980536593 |
| Transporter EPA ID: | NJD080631369 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 01/09/2006 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

| | |
|---|---|
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 01/09/2006 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | 04030621 |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

| | |
|---|---|
| EPA ID: | NY0000195263 |
| Manifest Number: | 000214229VES |
| Date Shipped: | 02/04/2008 |
| TSDF EPA ID: | NJD980536593 |
| Transporter EPA ID: | NJD080631369 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 02/04/2008 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 02/04/2008 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |

**COSMETIC CAR CARE INC (Continued)** **1004755658**

Was Load Rejected: N
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: Not reported
Waste Code: F003
Hand Code: H141
Quantity: 400
Unit: P

---

**L61** **JOB SITE** **NY Spills** **S102402237**
**SSW** **416 RIVERDALE AVE** **N/A**
**< 1/8** **YONKERS, NY**
**0.116 mi.**
**612 ft.** **Site 1 of 10 in cluster L**

**Relative:** **Higher**
**Actual:** **75 ft.**

SPILLS:

| | |
|---|---|
| Name: | JOB SITE |
| Address: | 416 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9605985 / 1996-08-08 |
| Facility ID: | 9605985 |
| Facility Type: | ER |
| DER Facility ID: | 247560 |
| Site ID: | 306528 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 1996-08-08 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1996-08-08 |
| CID: | 252 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1996-08-08 |
| Spill Record Last Update: | 1996-09-12 |
| Spiller Name: | BARBARA MULDOON |
| Spiller Company: | HUDSON CANYON CONSTR |
| Spiller Address: | 115 BEVRIES AVE |
| Spiller Company: | 001 |
| Contact Name: | KAREN BROWN |
| Latitude: | 40.9179622 |
| Longitude: | -73.9014857 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | hydraulic fluid has been cleaned up and equiptment repaired |

**JOB SITE (Continued)** **S102402237**

All Materials:

| | |
|---|---|
| Site ID: | 306528 |
| Operable Unit ID: | 1033496 |
| Operable Unit: | 01 |
| Material ID: | 348728 |
| Material Code: | 0010 |
| Material Name: | hydraulic oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 10.00 |
| Units: | G |
| Recovered: | 10.00 |
| Oxygenate: | Not reported |

---

**L62** **GAS STATION** **NY Spills** **S102399586**
**SSW** **416-418 RIVERDALE AVE** **N/A**
**< 1/8** **YONKERS, NY**
**0.116 mi.**
**612 ft.** **Site 2 of 10 in cluster L**

**Relative:** **Higher**

**Actual:** **75 ft.**

SPILLS:

| | |
|---|---|
| Name: | GAS STATION |
| Address: | 416-418 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9605951 / Not Reported |
| Facility ID: | 9605951 |
| Facility Type: | ER |
| DER Facility ID: | 201990 |
| Site ID: | 245979 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B1 |
| SWIS: | 6018 |
| Spill Date: | 1996-08-06 |
| Investigator: | RDBENDEL |
| Referred To: | Not reported |
| Reported to Dept: | 1996-08-08 |
| CID: | 205 |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | True |
| UST Trust: | True |
| Remediation Phase: | 4 |
| Date Entered In Computer: | 1996-08-08 |
| Spill Record Last Update: | 2021-03-25 |
| Spiller Name: | Not reported |
| Spiller Company: | BARRIER OIL COMPANY |
| Spiller Address: | Not reported |
| Spiller Company: | 001 |
| Contact Name: | HARRY LANGER |
| Latitude: | 40.9179622 |
| Longitude: | -73.9014857 |

**GAS STATION (Continued)** **S102399586**

DEC Memo: 11/05/09 DEC will consolidate JO'M 12-13 request update RDB
Remarks: abandoned gas station , site work shows contaminated soil.

All Materials:

Site ID: 245979
Operable Unit ID: 1036761
Operable Unit: 01
Material ID: 348698
Material Code: 0009
Material Name: gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: G
Recovered: Not reported
Oxygenate: True

Site ID: 245979
Operable Unit ID: 1036761
Operable Unit: 01
Material ID: 573508
Material Code: 1213A
Material Name: MTBE (methyl-tert-butyl ether)
Case No.: 01634044
Material FA: Hazardous Material
Quantity: Not reported
Units: Not reported
Recovered: Not reported
Oxygenate: True

---

**L63** **RIVERDALE BP** **NY UST** **U004441474**
**SSW** **416 RIVERDALE AVE.** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.116 mi.**
**612 ft.** **Site 3 of 10 in cluster L**

**Relative:**
**Higher**

**Actual:**
**75 ft.**

WESTCHESTER CO. UST:

Name: RIVERDALE BP
Address: 416 RIVERDALE AVE.
City,State,Zip: YONKERS, NY 10705
Id/Status: 3-497614 / Administratively Closed
Operator Name: Dan Badillo
Owner Name: 416 Riverdale Ave. Corp.
Owner Street: 60 East 42 Street
Owner Address2: Not reported
Owner City: New York
Owner State: NY
Owner Zipcode: 10165
GDS Number: Not reported

Tank Number: 1
Status: 0. Administratively closed
Capacity: 4000
Product Stored: 0009. Gasoline
Product Stored Percent: Not reported
Tank Leak Detection: 0. None
Date Installation: 01/01/1900

**RIVERDALE BP (Continued)** **U004441474**

| | |
|---|---|
| Date Perm Closure: | 01/23/2002 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 1. Epoxy liner |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | Not reported |
| Piping Type: | Not reported |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 2 |
| Status: | 0. Administratively closed |
| Capacity: | 4000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/01/1900 |
| Date Perm Closure: | 01/23/2002 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | Not reported |
| Piping Type: | Not reported |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 3 |
| Status: | 0. Administratively closed |
| Capacity: | 4000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/01/1900 |
| Date Perm Closure: | 01/23/2002 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | Not reported |
| Piping Type: | Not reported |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

**RIVERDALE BP (Continued)** **U004441474**

| | |
|---|---|
| Tank Number: | 4 |
| Status: | 0. Administratively closed |
| Capacity: | 550 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/01/1900 |
| Date Perm Closure: | 01/23/2002 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | Not reported |
| Piping Type: | 10. Copper |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**L64** **GAS STATION** **UST FINDER RELEASE** **1029064782**
**SSW** **416-418 RIVERDALE AVE** **N/A**
**< 1/8** **YONKERS, NY 0**
**0.116 mi.**
**612 ft.** **Site 4 of 10 in cluster L**

**Relative:**
**Higher**

**Actual:**
**75 ft.**

UST FINDER RELEASE:

| | |
|---|---|
| Object ID: | 258831 |
| Facility ID: | NY201990 |
| Lust ID: | NY9605951 |
| Name: | GAS STATION |
| Address: | 416-418 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 0 |
| Address Match Type: | Not reported |
| Reported Date: | 1996/08/06 15:59:59+00 |
| Status: | Open |
| Substance: | Not reported |
| Population within 1500ft: | 9571 |
| Domestic Wells within 1500ft: | 0 |
| Land Use: | Developed, Medium Intensity |
| Within SPA: | No |
| SPA PWS Facility ID: | Not reported |
| SPA Water Type: | Not reported |
| SPA Facility Type: | Not reported |
| SPA HUC12: | Not reported |
| Within WHPA: | No |
| WHPA PWS Facility ID: | Not reported |
| WHPA Water Type: | Not reported |
| WHPA Facility Type: | Not reported |
| WHPA HUC12: | Not reported |
| Within 100yr Floodplain: | No |
| Tribe: | Not reported |
| EPA Region: | 2 |
| NFA Letter 1: | Not reported |
| NFA Letter 2: | Not reported |
| NFA Letter 3: | Not reported |
| NFA Letter 4: | Not reported |

**GAS STATION (Continued)** **1029064782**

| | |
|---|---|
| Closed With Residual Contaminate: | Not reported |
| Coordinate Source: | State |
| X Coord: | -73.90149 |
| Y Coord: | 40.9179600000001 |
| Latitude: | 40.91796 |
| Longitude: | -73.9014899999999 |

---

**L65** **ANSELMO CARL INC** **EDR Hist Auto** **1020660899**
**SSW** **418 RIVERDALE AVENUE** **N/A**
**< 1/8** **YONKERS, NY 10705**
**0.117 mi.**
**616 ft.** **Site 5 of 10 in cluster L**

**Relative:** EDR Hist Auto
**Higher**

**Actual:** **75 ft.**

| Year: | Name: | Type: |
|---|---|---|
| 1973 | RIVER AM SERVICE STATION INC | Gasoline Service Stations |
| 1985 | ANSELMO CARL INC | General Automotive Repair Shops |
| 1986 | ANSELMO CARL INC | General Automotive Repair Shops |
| 1987 | ANSELMO CARL INC | General Automotive Repair Shops |
| 1992 | RIVERDALE B P | General Automotive Repair Shops |
| 1993 | RIVERDALE B P | General Automotive Repair Shops |

---

**I66** **ABOVE GROUND TANK REMOVAL** **NY Spills** **S112146683**
**South** **154 RADFORD AVE** **N/A**
**< 1/8** **YONKERS, NY**
**0.117 mi.**
**619 ft.** **Site 2 of 5 in cluster I**

**Relative:** SPILLS:
**Higher**

**Actual:** **79 ft.**

| | |
|---|---|
| Name: | ABOVE GROUND TANK REMOVAL |
| Address: | 154 RADFORD AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1202260 / 2013-05-01 |
| Facility ID: | 1202260 |
| Facility Type: | ER |
| DER Facility ID: | 419391 |
| Site ID: | 465014 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2012-06-06 |
| Investigator: | JKOMARA |
| Referred To: | Not reported |
| Reported to Dept: | 2012-06-06 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | 2012-06-06 |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |

**ABOVE GROUND TANK REMOVAL (Continued)** **S112146683**

| | |
|---|---|
| Date Entered In Computer: | 2012-06-06 |
| Spill Record Last Update: | 2013-05-01 |
| Spiller Name: | NICKY |
| Spiller Company: | QUANTUM PROPERTY MANAGEMENT |
| Spiller Address: | 154 RADFORD AVE |
| Spiller Company: | 999 |
| Contact Name: | NICKY |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 6/6/12 This is a Westchester County DOH registered facility, Denise Heinzinger, will handle...mm 06/06/12 Chris Lalak emailed Denise will inspect later today (scheduled tank pull) 05/01/13 Denise Heinzinger reported, 154 Radford Ave, Yonkers an aboveground, vaulted tank filled with sand at an apartment building that was removed. 2 holes discovered clean up & sampling performed to and through concrete pad - satisfactory. NFA TG |
| Remarks: | Unknown quantity joe 914-592-1100 |

All Materials:

| | |
|---|---|
| Site ID: | 465014 |
| Operable Unit ID: | 1215048 |
| Operable Unit: | 01 |
| Material ID: | 2213123 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**I67** **154 RADFORD AVE APT OWNERS CORP** **NY AST** **A100379822**
**South** **154 RADFORD AVENUE** **N/A**
**< 1/8** **YONKERS, NY 10701**
**0.117 mi.**
**619 ft.** **Site 3 of 5 in cluster I**

**Relative:** **Higher**
**Actual:** **79 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | 154 RADFORD AVE APT OWNERS CORP |
| Address: | 154 RADFORD AVENUE |
| City,State,Zip: | YONKERS, NY 10701 |
| PBS Number: | 3-801773 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Barry |
| Owner Name: | 154 Radford Ave Apt Owners Corp, c/o Quantum Mgmt |
| Owner Street: | 11-11 44th Drive |
| Owner Address2: | 2nd Floor, Suite S |
| Owner City/State/Zip: | Long Island City, NY 11101 |
| Tank Number: | 2 |
| Status: | 1. In-Service |
| Date Installation: | 10/01/2012 |
| Capacity: | 2500 |

**154 RADFORD AVE APT OWNERS CORP (Continued)** **A100379822**

| | |
|---|---|
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | Not reported |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 1. Electronic Interstitial Monitoring,6. Impervious Barrier/Concrete Pad (Aboveground Only) |
| Tank Secondary Containment: | 2. Vault (w/ access),10. Impervious Underlayment (AST Only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | Not reported |
| Piping Leak Detection: | 1. Electronic Interstitial Monitoring |
| Piping Secondary Containment: | Not reported |
| Overfill Prevention: | 2. High Level Alarm,4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 2. Suction |

---

**I68** **154 RADFORD AVE APT OWNERS CORP** **NY UST** **U004190278**
**South** **154 RADFORD AVENUE** **N/A**
**< 1/8** **YONKERS, NY 10701**
**0.117 mi.**
**619 ft.** **Site 4 of 5 in cluster I**

**Relative:** **Higher**

**Actual:** **79 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | 154 RADFORD AVE APT OWNERS CORP |
| Address: | 154 RADFORD AVENUE |
| City,State,Zip: | YONKERS, NY 10701 |
| Id/Status: | 3-801773 / Active |
| Operator Name: | Barry |
| Owner Name: | 154 Radford Ave Apt Owners Corp, c/o Quantum Mgmt |
| Owner Street: | 11-11 44th Drive |
| Owner Address2: | 2nd Floor, Suite S |
| Owner City: | Long Island City |
| Owner State: | NY |
| Owner Zipcode: | 11101 |
| GDS Number: | Not reported |
| | |
| Tank Number: | 1 |
| Status: | 3. Closed - Removed |
| Capacity: | 2500 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | 0 |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/01/1940 |
| Date Perm Closure: | 06/06/2012 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 3. Vault (w/ no access) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only),5. Vent Whistle |
| Piping Secondary Containment: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

**M69** **PROFETA** **NY Spills** **S104647379**
**NNW** **32 PURSER PLACE** **N/A**
**< 1/8** **YONKERS, NY**
**0.123 mi.**
**650 ft.** **Site 1 of 2 in cluster M**

**Relative:** **Lower**

**Actual:** **51 ft.**

SPILLS:

| | |
|---|---|
| Name: | PROFETA |
| Address: | 32 PURSER PLACE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9805619 / 2009-12-16 |
| Facility ID: | 9805619 |
| Facility Type: | ER |
| DER Facility ID: | 245936 |
| Site ID: | 304436 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C5 |
| SWIS: | 6018 |
| Spill Date: | 1998-08-05 |
| Investigator: | JBODee |
| Referred To: | Not reported |
| Reported to Dept: | 1998-08-05 |
| CID: | 266 |
| Water Affected: | Not reported |
| Spill Source: | Private Dwelling |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1998-08-05 |
| Spill Record Last Update: | 2009-12-16 |
| Spiller Name: | Not reported |
| Spiller Company: | PHILIP PROFETA |
| Spiller Address: | 189 MAIN STREET |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | 40.9205077 |
| Longitude: | -73.9020374 |
| DEC Memo: | 9/28/98 LEAKING FEED LINE BETWEEN TANK AND BURNER. HOME OWNER STATES NES HIRED FOR CLEANUP. 12/9/98<br>NES AND ROBISON OIL STILL AWAITING AUTHORIZATION TO COMPLETE CLEANUP. 04/24/05 NO FURTHER<br>INFORMATION SUBMITTED TO DEC AS OF THIS DATE. jod 12/16/09 No Info NFA<br>JO'M |
| Remarks: | BROKEN FUEL LINE BETWEEN TANK AND FURNACE. LEAKING INTO THE GROUND. LINE BLOWN OUT AND A VALVE WAS PUT IN PLACE. OWNER TO BE CONTACTED REGARDING REPAIR AND CLEAN UP. |

All Materials:

| | |
|---|---|
| Site ID: | 304436 |
| Operable Unit ID: | 1066806 |
| Operable Unit: | 01 |
| Material ID: | 320361 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |

**PROFETA (Continued)** **S104647379**

| | |
|---|---|
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**I70** **GRAY PLACE MANAGEMENT LLC** **NY AST** **A100356490**
**South** **10 GRAY PLACE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.127 mi.**
**669 ft.** **Site 5 of 5 in cluster I**

**Relative:** **Higher**
**Actual:** **81 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | GRAY PLACE MANAGEMENT LLC |
| Address: | 10 GRAY PLACE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-800870 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Gray Place Management |
| Owner Name: | Gray Place Management LLC |
| Owner Street: | P.O. Box 116 |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Eastchester, NY 10709 |
| | |
| Tank Number: | 001 |
| Status: | 1. In-Service |
| Date Installation: | 01/01/1990 |
| Capacity: | 2000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | 0 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 6. Impervious Barrier/Concrete Pad (Aboveground Only) |
| Tank Secondary Containment: | 2. Vault (w/ access),10. Impervious Underlayment (AST Only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 2. Manual Interstitial Monitoring |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 1. Float Vent Valve,5. Vent Whistle |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 3. Gravity |

**N71** **CON EDISON** **NY MANIFEST** **S117317740**
**SSE** **RADFORD ST & CLIFF AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.129 mi.**
**680 ft.** **Site 1 of 15 in cluster N**

**Relative:**
**Higher**

**Actual:**
**77 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004651972 |
| Country: | USA |
| Name: | Con Edison |
| Address: | RADFORD ST & CLIFF AVE |
| Address 2: | TM # 1220 |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | RADFORD ST & CLIFF AVE |
| Location Address 2: | TM # 1220 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Tom Telling |
| Mailing Address 1: | 4 IRVING PLACE-15TH FLOOR |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 09/09/2014 |
| Trans1 Recv Date: | 09/09/2014 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 09/15/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004651972 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 012771753JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CON EDISON (Continued)** **S117317740**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 300 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**N72** **CON EDISON** **PA MANIFEST** **S125059103**
**SSE** **CLIFF AVE & RADFORD ST** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.129 mi.**
**680 ft.** **Site 2 of 15 in cluster N**

**Relative:** **Higher**

**Actual:** **77 ft.**

PA MANIFEST:

| | |
|---|---|
| Name: | Con Edison |
| Address: | CLIFF AVE & RADFORD ST |
| City,State,Zip: | YONKERS, NY 10705 |
| Year: | 2018 |
| Manifest Number: | 011531494FLE |
| Manifest Type: | T |
| Generator EPA ID: | NYP004813073 |
| Generator Date: | 03/22/2018 |
| Mailing Address: | Not reported |
| Contact Name: | Not reported |
| Contact Phone: | Not reported |
| TSD EPA ID: | Not reported |
| TSD Date: | Not reported |
| TSD Facility Name: | Republic Environmental Systems (Pennsylvania) LLC |
| TSD Facility Address: | 2869 Sandstone Dr |
| TSD Facility City: | Hatfield |
| TSD Facility State: | PA |
| Facility Telephone: | Not reported |
| Page Number: | 1 |
| Line Number: | 1 |
| Waste Number: | D008 |
| Container Number: | 1 |
| Container Type: | TT |
| Waste Quantity: | 1461 |
| Unit: | P |
| Handling Code: | Not reported |
| TSP EPA ID: | PAD085690592 |
| Date TSP Sig: | Not reported |

**O73** **CON EDISON** **RCRA NonGen / NLR** **1019908635**
**ENE** **92 HAMILTON AVE** **FINDS** **NYP004848182**
**1/8-1/4** **YONKERS, NY 10705** **ECHO**
**0.130 mi.**
**686 ft.** **Site 1 of 8 in cluster O**

**Relative:** **Higher**
**Actual:** **75 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20151005 |
| Handler Name: | | Con Edison |
| Handler Address: | | Hamilton Ave |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYP004848182 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |

**CON EDISON (Continued)** **1019908635**

| | |
|---|---|
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160909 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20151005 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Large Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20151005 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

**CON EDISON (Continued)** **1019908635**

FINDS:
Registry ID: 110069680410

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1019908635
Registry ID: 110069680410

DFR URL:
Name: CON EDISON
Address: 92 Hamilton Ave
City,State,Zip: YONKERS, NY 10705

---

**O74** **CON EDISON TRANSFORMER MANHOLE: 1100** **RCRA NonGen / NLR** **1016960252**
**ENE** **92 HAMILTON AVE** **NY MANIFEST** **NYP004321170**
**1/8-1/4** **YONKERS, NY 10702**
**0.130 mi.**
**686 ft.** **Site 2 of 8 in cluster O**

**Relative:**
**Higher**

**Actual:**
**75 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20130717 |
| Handler Name: | | Con Edison Transformer Manhole: 1100 |
| Handler Address: | | Hamilton Ave |
| Handler City,State,Zip: | | YONKERS, NY 10702 |
| EPA ID: | | NYP004321170 |
| Contact Name: | | DOMINIC BIZZARO |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 914-925-6219 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SR SPECIALIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, RM 828 |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |

**CON EDISON TRANSFORMER MANHOLE: 1100 (Continued)** **1016960252**

| | |
|---|---|
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20140701 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20130617 |
| Handler Name: | CON EDISON TRANSFORMER MANHOLE: 1100 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20130717 |
| Handler Name: | CON EDISON TRANSFORMER MANHOLE: 1100 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |

**CON EDISON TRANSFORMER MANHOLE: 1100 (Continued)** **1016960252**

| | |
|---|---|
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004321170 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 92 HAMILTON AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10702 |
| Zip 4: | Not reported |
| Location Address 1: | OPP 92 HAMILTON |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PLACE 15TH FLOOR |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | NYD006982359 |
| Generator Ship Date: | 06/17/2013 |
| Trans1 Recv Date: | 06/17/2013 |
| Trans2 Recv Date: | 06/18/2013 |
| TSD Site Recv Date: | 06/18/2013 |
| Part A Recv Date: | Not reported |

**CON EDISON TRANSFORMER MANHOLE: 1100 (Continued)** **1016960252**

| | |
|---|---|
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004321170 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 011693226JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 350 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

| | |
|---|---|
| EPA ID: | NYP004848182 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 92 HAMILTON AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | 92 HAMILTON AVE |
| Location Address 2: | TM 1100 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Dennis Huacon |
| Mailing Address 1: | 4 IRVING PL 15TH FL |
| Mailing Address 2: | Not reported |

**CON EDISON TRANSFORMER MANHOLE: 1100 (Continued)** **1016960252**

Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 10/05/2015
Trans1 Recv Date: 10/05/2015
Trans2 Recv Date: Not reported
TSD Site Recv Date: 10/06/2015
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004848182
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 013245149JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 60
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

**O75**
**ENE**
**1/8-1/4**
**0.130 mi.**
**686 ft.**

**CON EDISON**
**92 HAMILTON AVE**
**YONKERS, NY 10705**

**Site 3 of 8 in cluster O**

**NJ MANIFEST** **S120677557**
**N/A**

**Relative:**
**Higher**

**Actual:**
**75 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004848182 |
| Name: | CON EDISON |
| Address: | 92 HAMILTON AVE |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004848182 |
| Manifest Number: | 013245149JJK |
| Date Shipped: | 10/5/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |

**CON EDISON (Continued)** **S120677557**

| | |
|---|---|
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

---

**J76** **SAMAN B NEMEH** **NY UST** **U004441629**
**NE** **69 HAMILTON AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10703**
**0.131 mi.**
**691 ft.** **Site 5 of 10 in cluster J**

**Relative:** WESTCHESTER CO. UST:
**Higher**

**Actual:**
**69 ft.**

| | |
|---|---|
| Name: | SAMAN B NEMEH |
| Address: | 69 HAMILTON AVE |
| City,State,Zip: | YONKERS, NY 10703 |
| Id/Status: | 3-800094 / Unregulated: <1101 gal. PBS |
| Operator Name: | Not reported |
| Owner Name: | Saman Nemeh |
| Owner Street: | 646 Palisade Ave |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10703 |
| GDS Number: | Not reported |
| | |
| Tank Number: | 1 |
| Status: | 3. Closed - Removed |
| Capacity: | 2000 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | 09/01/1998 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

**J77** **RESIDENCE** **NY LTANKS** **S103478269**
**NE** **69 HAMILTON AVE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.131 mi.**
**691 ft.** **Site 6 of 10 in cluster J**

**Relative:** LTANKS:
**Higher**

**Actual:**
**69 ft.**

| | |
|---|---|
| Name: | RESIDENCE |
| Address: | 69 HAMILTON AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9806576 / 2005-02-09 |
| Facility ID: | 9806576 |
| Site ID: | 321175 |
| Spill Date: | 1998-08-27 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jkomara |
| Referred To: | Not reported |
| Reported to Dept: | 1998-08-27 |
| CID: | 252 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1998-08-27 |
| Spill Record Last Update: | 2005-02-09 |
| Spiller Name: | SAM NEMEH |
| Spiller Company: | RESIDENCE |
| Spiller Address: | 69 HAMILTON AVE |
| Spiller County: | 001 |
| Spiller Contact: | SAM NEMEH |
| Spiller Phone: | (914) 968-7828 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 258747 |
| Latitude: | 40.9212707 |
| Longitude: | -73.8979751 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'MARA 9/3/98 UNREGISTERED PBS FACILITY. REMOVED 2000 GAL. #2 TANK. HOLE IN TANK. MINIMAL SOIL CONTAM. ENCOUNTERED BUT ALL OF IT COULD NOT BE EXCAVATED DUE TO PROXIMITY OF STREET AND BLDG. GAVE OK TO BACKFILL & PROCEED WITH NEW INSTALLATION. STARS SAMPLES TAKEN - AWAITING RESULTS. 12/10/98 STARS SAMPLES SHOWED CONTAMINATION REMAINS. CONTRACTOR (TAKE PRIDE) HAB BEEN GIVEN PERMISSION TO BACKFILL BY WCHD, B. MCDONALD. WCHD HAS FORWARDED CASE TO DEC - J. O'MARA (SPILLS) AND A. KLAUS (DIV OF ENVIRO. REMEDIATION) - DUE TO TYPES OF CONTAMINATION DETECTED. 12/14/98 SAMPLE RESULTS RECEIVED SHOWING STARS EXCEEDANCES. SENT LETER REQUESTING SUBSURFACE INVESTIGATION. COPIES OF LAB RESULTS & LETTER SENT TO J. O'MARA FOR FOLLOW UP. REQUESTED FUEL TANK CLOSURE REPORT FROM CONTACTOR (TAKE PRIDE). 2/9/05 on review and discussion with B Mcdonald soil results relatively clean and spill can be closed |
| Remarks: | TANK TO BE ISOLATED AND RE-TESTED. |

**RESIDENCE (Continued)** **S103478269**

All TTF:

| | |
|---|---|
| Facility ID: | 9806576 |
| Spill Number: | 9806576 |
| Spill Tank Test: | 1546202 |
| Site ID: | 321175 |
| Tank Number: | 1 |
| Tank Size: | 2000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 321175 |
| Operable Unit ID: | 1067796 |
| Operable Unit: | 01 |
| Material ID: | 317730 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**J78** **CON EDISON MANHOLE 1097** **RCRA NonGen / NLR** **1014917953**
**NE** **69 HAMILTON AVE FRONT OF** **NJ MANIFEST** **NYP004215364**
**1/8-1/4** **YONKERS, NY 10703**
**0.131 mi.**
**691 ft.** **Site 7 of 10 in cluster J**

**Relative:** **Higher**
**Actual:** **69 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20101011 |
| Handler Name: | Con Edison Manhole 1097 |
| Handler Address: | Hamilton Ave Front Of |
| Handler City,State,Zip: | YONKERS, NY 10703 |
| EPA ID: | NYP004215364 |
| Contact Name: | DENNIS ROHRER |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 914-925-6219 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | SR SPECIALIST |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |

**CON EDISON MANHOLE 1097 (Continued)** **1014917953**

| | | |
|---|---|---|
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL RM 828 |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20110701 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20100911 |
| Handler Name: | CON EDISON MANHOLE 1097 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small |

**CON EDISON MANHOLE 1097 (Continued)** **1014917953**

| | |
|---|---|
| | Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20101011 |
| Handler Name: | CON EDISON MANHOLE 1097 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004215364 |
| Name: | CON EDISON MANHOLE 1097 |
| Address: | 69 HAMILTON AVE FRONT OF |
| City,State,Zip: | YONKERS, NY 10703 |
| County: | Not reported |
| Mailing Address: | IRVING PL RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | DENNIS ROHRER |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

**CON EDISON MANHOLE 1097 (Continued)** **1014917953**

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004215364 |
| Manifest Number: | 003533451JJK |
| Date Shipped: | 09/11/2010 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 09/11/2010 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 09/13/2010 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 65 |
| Unit: | P |

**O79** **POST STREET REVOCABLE TRUST** **NY AST** **A100360977**
**East** **26-30 POST STREET** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.132 mi.**
**695 ft.** **Site 4 of 8 in cluster O**

**Relative:** **Higher**
**Actual:** **79 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | POST STREET REVOCABLE TRUST |
| Address: | 26-30 POST STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-103926 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | POST STREET REVOCABLE TRUST |
| Owner Name: | Post Street Revocable Trust |
| Owner Street: | 2 Barnaby Lane |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Hartsdale, NY 10530 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 12/01/1936 |
| Capacity: | 4900 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | 0. None |
| Dispenser: | 3. Gravity |

---

**80** **DIAZ RESIDENCE** **NY LTANKS** **S107523632**
**NNE** **62 LIVINGSTON AVE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.132 mi.**
**696 ft.**

**Relative:** **Higher**
**Actual:** **64 ft.**

LTANKS:

| | |
|---|---|
| Name: | DIAZ RESIDENCE |
| Address: | 62 LIVINGSTON AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0513069 / 2006-02-13 |
| Facility ID: | 0513069 |
| Site ID: | 359483 |
| Spill Date: | 2006-02-11 |
| Spill Cause: | Tank Overfill |
| Spill Source: | Private Dwelling |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |

**DIAZ RESIDENCE (Continued)** **S107523632**

| | |
|---|---|
| Investigator: | KABROWNE |
| Referred To: | Not reported |
| Reported to Dept: | 2006-02-11 |
| CID: | 71 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2006-02-13 |
| Spill Record Last Update: | 2006-02-16 |
| Spiller Name: | ED ALLAN |
| Spiller Company: | DIAZ RESIDENCE |
| Spiller Address: | 62 LIVINGSTON AVE |
| Spiller County: | 001 |
| Spiller Contact: | ED ALLAN |
| Spiller Phone: | (914) 345-5700 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 309531 |
| Latitude: | 40.9215950 |
| Longitude: | -73.8992620 |
| DEC Memo: | Cleaned up |
| Remarks: | CUSTOMER ORDERED AMOUNT OF OIL TOO MUCH FOR TANK TO HOLD. CONFINED TO CONCRETE. CLEAN UP IN PROGRESS. |

All Materials:

| | |
|---|---|
| Site ID: | 359483 |
| Operable Unit ID: | 1116692 |
| Operable Unit: | 01 |
| Material ID: | 2107138 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 2.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**P81** **125 HOLDING LLC** **NY AST** **A100276555**
**ESE** **125 ELLIOTT AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.132 mi.**
**698 ft.** **Site 1 of 5 in cluster P**

**Relative:** **Higher**
**Actual:** **89 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | 125 HOLDING LLC |
| Address: | 125 ELLIOTT AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-164747 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | 125 Holding LLC |
| Owner Name: | 125 Holding LLC |

**125 HOLDING LLC (Continued)** **A100276555**

| | |
|---|---|
| Owner Street: | 125 P.O. Box 198 |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Bronx, NY 10461 |
| Tank Number: | 2 |
| Status: | 1. In-Service |
| Date Installation: | 02/01/1994 |
| Capacity: | 5000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 6. Impervious Barrier/Concrete Pad (Aboveground Only) |
| Tank Secondary Containment: | 2. Vault (w/ access) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 1. Painted/Asphalt Coating |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 2. Vault (w/ access) |
| Overfill Prevention: | 5. Vent Whistle |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**P82** **125 HOLDING LLC** **NY UST** **U004333713**
**ESE** **125 ELLIOTT AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.132 mi.**
**698 ft.** **Site 2 of 5 in cluster P**

**Relative:** **Higher**
**Actual:** **89 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | 125 HOLDING LLC |
| Address: | 125 ELLIOTT AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-164747 / Active |
| Operator Name: | 125 Holding LLC |
| Owner Name: | 125 Holding LLC |
| Owner Street: | 125 P.O. Box 198 |
| Owner Address2: | Not reported |
| Owner City: | Bronx |
| Owner State: | NY |
| Owner Zipcode: | 10461 |
| GDS Number: | Not reported |
| Tank Number: | 1 |
| Status: | 4. Closed - in place |
| Capacity: | 10000 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | Not reported |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |

**125 HOLDING LLC (Continued)** **U004333713**

| | |
|---|---|
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 6. Wrapped (Piping) |
| Overfill Prevention: | 5. Vent Whistle |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | Not reported |
| Dispenser: | 2. Suction |

---

**K83** **DOMINO TRANSPORT SERVICES** **NY UST** **U004439977**
**North** **308 RIVERDALE AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.134 mi.**
**709 ft.** **Site 2 of 2 in cluster K**

**Relative:** **Higher**
**Actual:** **57 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | DOMINO TRANSPORT SERVICES |
| Address: | 308 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10701 |
| Id/Status: | 3-600389 / Unregulated |
| Operator Name: | Geronimo Domino |
| Owner Name: | Geronimo Domino |
| Owner Street: | 9 Livingston Avenue |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10705 |
| GDS Number: | Not reported |

| | |
|---|---|
| Tank Number: | 01 |
| Status: | 3. Closed - Removed |
| Capacity: | 1000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | Not reported |
| Date Installation: | 04/01/2001 |
| Date Perm Closure: | 06/10/2010 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 6. Fiberglass reinforced plastic (FRP) |
| Tank Internal Protection: | 3. Fiberglass liner (FRP) |
| Tank External Protection: | 4. Fiberglass |
| Tank Secondary Containment: | 4. Double-Walled (underground only) |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | Not reported |
| Piping External Protection: | 4. Fiberglass |
| Overfill Prevention: | 3. Automatic Shut-off |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | Not reported |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 02 |
| Status: | 3. Closed - Removed |
| Capacity: | 1000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | Not reported |
| Date Installation: | 04/01/2001 |

**DOMINO TRANSPORT SERVICES (Continued)** **U004439977**

| | |
|---|---|
| Date Perm Closure: | 06/10/2010 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 6. Fiberglass reinforced plastic (FRP) |
| Tank Internal Protection: | 3. Fiberglass liner (FRP) |
| Tank External Protection: | 4. Fiberglass |
| Tank Secondary Containment: | 4. Double-Walled (underground only) |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | Not reported |
| Piping External Protection: | 4. Fiberglass |
| Overfill Prevention: | 3. Automatic Shut-off |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | Not reported |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 1 |
| Status: | 3. Closed - Removed |
| Capacity: | 550 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | 04/15/2001 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 2 |
| Status: | 3. Closed - Removed |
| Capacity: | 550 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | 04/15/2001 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

**DOMINO TRANSPORT SERVICES (Continued)** **U004439977**

| | |
|---|---|
| Tank Number: | 3 |
| Status: | 3. Closed - Removed |
| Capacity: | 550 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | 04/15/2001 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 4 |
| Status: | 3. Closed - Removed |
| Capacity: | 550 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | 04/15/2001 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 5 |
| Status: | 3. Closed - Removed |
| Capacity: | 550 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | 04/15/2001 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |

**DOMINO TRANSPORT SERVICES (Continued)** **U004439977**

| | |
|---|---|
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 6 |
| Status: | 3. Closed - Removed |
| Capacity: | 550 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | 04/15/2001 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 7 |
| Status: | 3. Closed - Removed |
| Capacity: | 1000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | 04/15/2001 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 2. Galvanized steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

**J84** **GSB HAMILTON LLC** **NY AST** **A100355583**
**ENE** **84-86 HAMILTON AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.135 mi.**
**714 ft.** **Site 8 of 10 in cluster J**

**Relative:** **Higher**
**Actual:** **72 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | GSB HAMILTON LLC |
| Address: | 84-86 HAMILTON AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-292400 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Finger Management |
| Owner Name: | GSB Hamilton LLC |
| Owner Street: | 20 Tuckahoe Road |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10710 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 01/01/1992 |
| Capacity: | 3000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | 100 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 6. Impervious Barrier/Concrete Pad (Aboveground Only) |
| Tank Secondary Containment: | 2. Vault (w/ access) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 1. Painted/Asphalt Coating |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 1. Diking (aboveground only) |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only),5. Vent Whistle |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

---

**N85** **CON EDISON** **NJ MANIFEST** **S120674476**
**SSE** **73 CLIFF AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.136 mi.**
**718 ft.** **Site 3 of 15 in cluster N**

**Relative:** **Higher**
**Actual:** **79 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004813073 |
| Name: | CON EDISON |
| Address: | 73 CLIFF AVE |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |

**CON EDISON (Continued)** **S120674476**

| | |
|---|---|
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004813073 |
| Manifest Number: | 014472141JJK |
| Date Shipped: | 7/27/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

**N86** **CON EDISON** **RCRA NonGen / NLR** **1019905744**
**SSE** **73 CLIFF AVE** **NYP004813073**
**1/8-1/4** **YONKERS, NY 10705**
**0.136 mi.**
**718 ft.** **Site 4 of 15 in cluster N**

**Relative:** **Higher**
**Actual:** **79 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20150727 |
| Handler Name: | | Con Edison |
| Handler Address: | | Cliff Ave |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYP004813073 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |

**CON EDISON (Continued)** **1019905744**

| | |
|---|---|
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160909 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20150727 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Large Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20150727 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

**N87** **CON EDISON** **NY MANIFEST** **S118258285**
**SSE** **73 CLIFF AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.136 mi.**
**718 ft.** **Site 5 of 15 in cluster N**

**Relative:**
**Higher**

**Actual:**
**79 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004813073 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 73 CLIFF AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | 73 CLIFF AVE |
| Location Address 2: | MH 1217 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Tom Teeling |
| Mailing Address 1: | 4 IRVING PLACE - 15TH FLOOR |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/27/2015 |
| Trans1 Recv Date: | 07/27/2015 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/29/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004813073 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 014472141JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CON EDISON (Continued)** **S118258285**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Reactive Waste |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 100 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**M88** **110 MORRIS STREET** **NY AST** **A100360981**
**NNW** **110 MORRIS STREET** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.141 mi.**
**745 ft.** **Site 2 of 2 in cluster M**

**Relative:** **Lower**
**Actual:** **49 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | 110 MORRIS STREET |
| Address: | 110 MORRIS STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-139319 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Evan Wright |
| Owner Name: | Morris Purser Management Co. LLC |
| Owner Street: | PO Box 8418 |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Pelham, NY 10803 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 01/01/1990 |
| Capacity: | 4880 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 1. Diking (aboveground only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |

**110 MORRIS STREET (Continued)** **A100360981**

Piping Secondary Containment: 0. None
Overfill Prevention: 2. High Level Alarm
Spill Prevention: 0. None
Dispenser: 2. Suction

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**J89** **CON EDISON - ELECTRIC** **E MANIFEST** **1031951902**
**NE** **63 HAMILTON AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.142 mi.**
**749 ft.** **Site 9 of 10 in cluster J**

**Relative:**
**Higher**

**Actual:**
**69 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 017185766FLE |
| Last Updated Date: | 20220606 |
| Shipped Date: | 20220518 |
| Received Date: | 20220524 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Con Edison - Electric |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 63 HAMILTON AVE |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 116 Skyline Dr |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | South Plainfield |
| Generator Mail Zip: | 07080 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | KEARNY |
| Designated Facility Location Zip: | 07032 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

Transporter:

| | |
|---|---|
| Manifest Tracking Number: | 017185766FLE |
| Transporter Line Number: | 1 |
| Transporter EPA ID: | MAD039322250 |
| Transporter Name: | Clean Harbors Environmental Services Inc |

**CON EDISON - ELECTRIC (Continued)** **1031951902**

Waste Line:

| | |
|---|---|
| Manifest Tracking Number: | 017185766FLE |
| Waste Line Number: | 1 |
| U.S. DOT Hazardous Indicator: | Y |
| U.S. DOT ID Number: | NA3082 |
| U.S. DOT Description: | Rq, Na3082, Hazardous Waste, Liquid N.O.S., (Lead), 9, Pg Iii (D008) |
| Non-Hazardous Waste Description: | Not reported |
| Number of Containers: | 1 |
| Container Type Code: | TT |
| Container Type Description: | Cargo tanks (tank trucks) |
| Waste Quantity: | 200 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.1 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.1 |
| Waste Quantity, in Kilograms: | 90.703 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 90.703 |
| Management Method Code: | H110 |
| Management Method Description: | STABILIZATION |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | D008 |
| Quantity Haz Kg: | 90.703 |
| Quantity Haz Tons: | 0.1 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-T |

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**L90** **85 SAINT ANDREWS PLACE** **NY AST** **A100383061**
**South** **85 SAINT ANDREWS PLACE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.142 mi.**
**750 ft.** **Site 6 of 10 in cluster L**

**Relative:** **Higher**
**Actual:** **85 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | 85 SAINT ANDREWS PLACE |
| Address: | 85 SAINT ANDREWS PLACE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-601213 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | St. Andrews LLC |
| Owner Name: | St. Andrews LLC |

**85 SAINT ANDREWS PLACE (Continued)** **A100383061**

| | |
|---|---|
| Owner Street: | P.O. Box 116 |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Eastchester, NY 10709 |
| Tank Number: | 001 |
| Status: | 1. In-Service |
| Date Installation: | 01/01/1990 |
| Capacity: | 5000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 2. Aboveground (contact w/ impervious barrier) |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 6. Impervious Barrier/Concrete Pad (Aboveground Only) |
| Tank Secondary Containment: | 2. Vault (w/ access) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 5. Vent Whistle |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 3. Gravity |

---

**N91** **CON EDISON - COMPANY OF NY** **E MANIFEST** **1031950977**
**SSE** **75 CLIFF AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.143 mi.**
**754 ft.** **Site 6 of 15 in cluster N**

**Relative:** **Higher**
**Actual:** **82 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 006654573GBF |
| Last Updated Date: | 20211201 |
| Shipped Date: | 20211123 |
| Received Date: | 20211124 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Con Edison - Company Of Ny |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 75 CLIFF AVE |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 36 Butler Street |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | Elizabeth |
| Generator Mail Zip: | 07206 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |

**CON EDISON - COMPANY OF NY (Continued)** **1031950977**

Designated Facility Mail Street 1: Not reported
Designated Facility Mail Street 2: JACOBUS AVE
Designated Facility Mail City: KEARNY
Designated Facility Mail Zip: 07032
Designated Facility Mail State: NJ
Designated Facility Location Street Number: 105
Designated Facility Location Street 1: JACOBUS AVE
Designated Facility Location Street 2: Not reported
Designated Facility Location City: KEARNY
Designated Facility Location Zip: 07032
Designated Facility Location State: NJ
Designated Facility Contact Company Name: Not reported
Manifest Residue Indicator: N
Rejection Indicator: N

Transporter:
Manifest Tracking Number: 006654573GBF
Transporter Line Number: 1
Transporter EPA ID: NJD003812047
Transporter Name: Acv Environmental Services Inc.

Waste Line:
Manifest Tracking Number: 006654573GBF
Waste Line Number: 1
U.S. DOT Hazardous Indicator: Y
U.S. DOT ID Number: NA3082
U.S. DOT Description: Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq
Non-Hazardous Waste Description: Not reported
Number of Containers: 1
Container Type Code: TT
Container Type Description: Cargo tanks (tank trucks)
Waste Quantity: 1000
Quantity Unit of Measure Code: P
Quantity Unit of Measure Description: Pounds
Waste Quantity, in Tons: 0.5
Acute Waste Quantity, in Tons: 0
Non-Acute Waste Quantity, in Tons: 0.5
Waste Quantity, in Kilograms: 453.515
Acute Waste Quantity, in Kilograms: 0
Non-Acute Waste Quantity, in Kilorgrams: 453.515
Management Method Code: H110
Management Method Description: STABILIZATION
Waste Residue Indicator: N
Quantity Discrepancy Indicator: N
Waste Type Discrepancy Indicator: N
Waste Density: Not reported
Waste Density Unit of Measure Code: Not reported
Waste Density Unit of Measure Description: Not reported
Form Code: Not reported
Form Code Description: Not reported
Source Code: Not reported
Source Code Description: Not reported
Waste Minimization Code: Not reported
Waste Minimization Code Description: Not reported
Consent Number: Not reported
EPA Waste Indicator: Y

**CON EDISON - COMPANY OF NY (Continued)** **1031950977**

| | |
|---|---|
| Federal Waste Codes: | D008 |
| Quantity Haz Kg: | 453.515 |
| Quantity Haz Tons: | 0.5 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-T |

---

**J92** **P.J. PROPERTIES** **NY AST** **A100540492**
**ENE** **78 HAMILTON AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.143 mi.**
**756 ft.** **Site 10 of 10 in cluster J**

**Relative:**
**Higher**

**Actual:**
**71 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | P.J. PROPERTIES |
| Address: | 78 HAMILTON AVENUE |
| City,State,Zip: | YONKERS, NY 10701 |
| PBS Number: | 3-800430 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Michael Oles |
| Owner Name: | P.J. Properties |
| Owner Street: | 33 Arrowwood Circle |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Rye Brook, NY 10573 |
| | |
| Tank Number: | 001 |
| Status: | 1. In-Service |
| Date Installation: | 09/01/1998 |
| Capacity: | 5000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 1. Diking (aboveground only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only),5. Vent Whistle |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 3. Gravity |

**L93** **432 RIVERDALE APARTMENTS** **NY AST** **A100383060**
**SSW** **432 RIVERDALE AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.144 mi.**
**761 ft.** **Site 7 of 10 in cluster L**

**Relative:** **Higher**
**Actual:** **85 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | 432 RIVERDALE APARTMENTS |
| Address: | 432 RIVERDALE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-600896 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Sako Nurkovic |
| Owner Name: | Preferred Westchester Properties, Inc. |
| Owner Street: | 570 Yonkers Avenue |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10704 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 05/01/1970 |
| Capacity: | 2000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 1. Aboveground (contact w/ soil) |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 2. Vault (w/ access) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 5. Vent Whistle |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

---

**L94** **APT BUILDING** **NY LTANKS** **S102232740**
**SSW** **432 RIVERDALE AVE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.144 mi.**
**761 ft.** **Site 8 of 10 in cluster L**

**Relative:** **Higher**
**Actual:** **85 ft.**

LTANKS:

| | |
|---|---|
| Name: | APT BUILDING |
| Address: | 432 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9511941 / 1996-03-08 |
| Facility ID: | 9511941 |
| Site ID: | 214717 |
| Spill Date: | 1995-12-21 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |

**APT BUILDING (Continued)** **S102232740**

| | |
|---|---|
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1995-12-21 |
| CID: | 257 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1995-12-21 |
| Spill Record Last Update: | 1996-06-12 |
| Spiller Name: | TOM KIRYAKO |
| Spiller Company: | APT BUILDING |
| Spiller Address: | 432 RIVERDALE AVE |
| Spiller County: | 001 |
| Spiller Contact: | TOM KIRYAKO |
| Spiller Phone: | (916) 965-5942 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 177888 |
| Latitude: | 40.9172784 |
| Longitude: | -73.9015683 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was |
| Remarks: | GHIOSAY 03/08/96 RESEALED AN OLD PATCH AND RETESTED TANK PASSED<br>thinks there is a problem with fill line or vent |

All Materials:

| | |
|---|---|
| Site ID: | 214717 |
| Operable Unit ID: | 1026158 |
| Operable Unit: | 01 |
| Material ID: | 359264 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**P95** **CONGREGATION KOLLEL REMU** **NY AST** **A100540333**
**SE** **155-157 ELLIOT AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.144 mi.**
**761 ft.** **Site 3 of 5 in cluster P**

**Relative:** **Higher**
**Actual:** **88 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | CONGREGATION KOLLEL REMU |
| Address: | 155-157 ELLIOT AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-800777 |
| Site Status: | Unregulated |
| GDS Number: | Not reported |
| Operator Name: | Building Unoccupied |
| Owner Name: | Kollel Remu |

**CONGREGATION KOLLEL REMU (Continued)** **A100540333**

| | |
|---|---|
| Owner Street: | 45 WMBG St. West |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Brooklyn, NY 11211 |
| Tank Number: | 2 |
| Status: | 0. Administratively closed |
| Date Installation: | 01/09/1972 |
| Capacity: | 275 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | 0 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 1. Aboveground |
| Piping Type: | 10. Copper |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**P96** **CONGREGATION KOLLEL REMU** **NY UST** **U004439833**
**SE** **155-157 ELLIOT AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.144 mi.**
**761 ft.** **Site 4 of 5 in cluster P**

**Relative:** **Higher**
**Actual:** **88 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | CONGREGATION KOLLEL REMU |
| Address: | 155-157 ELLIOT AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-800777 / Active |
| Operator Name: | Building Unoccupied |
| Owner Name: | Kollel Remu |
| Owner Street: | 45 WMBG St. West |
| Owner Address2: | Not reported |
| Owner City: | Brooklyn |
| Owner State: | NY |
| Owner Zipcode: | 11211 |
| GDS Number: | Not reported |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Capacity: | 1500 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | 0 |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/09/1972 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |

**CONGREGATION KOLLEL REMU (Continued)** **U004439833**

| | |
|---|---|
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 10. Copper |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 3 |
| Status: | 1. In-Service |
| Capacity: | 550 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | 0 |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/09/1972 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 10. Copper |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**O97** **CON EDISON SERVICE BOX: 1251** **RCRA NonGen / NLR** **1016966913**
**ENE** **93 ELLIOT AVE & MORRIS AVE** **NY MANIFEST** **NYP004397519**
**1/8-1/4** **YONKERS, NY 10703**
**0.147 mi.**
**778 ft.** **Site 5 of 8 in cluster O**

**Relative:**
**Higher**

**Actual:**
**75 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20131225 |
| Handler Name: | Con Edison Service Box: 1251 |
| Handler Address: | Elliot Ave & Morris Ave |
| Handler City,State,Zip: | YONKERS, NY 10703 |
| EPA ID: | NYP004397519 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | SENIOR SCIENTIST |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |

**CON EDISON SERVICE BOX: 1251 (Continued)** **1016966913**

| | | |
|---|---|---|
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20140701 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Historic Generators:

| | | |
|---|---|---|
| Receive Date: | | 20131125 |
| Handler Name: | CON EDISON SERVICE BOX: 1251 | |
| Federal Waste Generator Description: | | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | | Ny |
| Large Quantity Handler of Universal Waste: | | No |
| Recognized Trader Importer: | | No |

**CON EDISON SERVICE BOX: 1251 (Continued)** **1016966913**

| | |
|---|---|
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20131225 |
| Handler Name: CON EDISON SERVICE BOX: | 1251 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004397519 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 93 ELLIOT AVE & MORRIS AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10703 |
| Zip 4: | Not reported |
| Location Address 1: | FT OF 93 ELLIOT AVE & MORRIS AVE |
| Location Address 2: | SB 1251 |
| Location City,State,Zip: | YONKERS, NY |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PL 15TH FL |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

**CON EDISON SERVICE BOX: 1251 (Continued)** **1016966913**

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 11/25/2013 |
| Trans1 Recv Date: | 11/25/2013 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 11/27/2013 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004397519 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 011695029JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 10 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

**N98** **CON EDISON** **RCRA NonGen / NLR** **1018280444**
**SE** **117 RADFORD ST** **FINDS** **NYP004753257**
**1/8-1/4** **YONKERS, NY 10705** **ECHO**
**0.149 mi.**
**787 ft.** **Site 7 of 15 in cluster N**

**Relative:** **Higher**
**Actual:** **81 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20150318 |
| Handler Name: | | Con Edison |
| Handler Address: | | Radford St |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYP004753257 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |

**CON EDISON (Continued)** **1018280444**

| | |
|---|---|
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160502 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20150318 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Large Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20150318 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

**CON EDISON (Continued)** **1018280444**

FINDS:
Registry ID: 110067706557

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1018280444
Registry ID: 110067706557

DFR URL:
Name: CON EDISON
Address: 117 Radford St
City,State,Zip: YONKERS, NY 10705

---

**N99** **CON EDISON** **NJ MANIFEST** **S120669186**
**SE** **117 RADFORD ST** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.149 mi.**
**787 ft.** **Site 8 of 15 in cluster N**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

NJ MANIFEST:
EPA ID: NYP004753257
Name: CON EDISON
Address: 117 RADFORD ST
City,State,Zip: YONKERS, NY 10705
County: Not reported
Mailing Address: IRVING PL, 15TH FL NE
Mailing City,State,Zip: NEW YORK, NY 10003
Telephone: Not reported
Emergency Telephone: Not reported
Contact: THOMAS TEELING
Comments: Not reported
SIC Code: Not reported
County: NY119
Municipal: Not reported
Previous EPAID: Not reported
Generator Flag: Not reported
Transporter Flag: Not reported
TSDF Flag: Not reported
Name Change: Not reported
Date Change: Not reported

Manifest Data:
EPA ID: NYP004753257
Manifest Number: 014091138JJK
Date Shipped: 3/18/2015
TSDF EPA ID: NJD002200046
Transporter EPA ID: NYD006982359
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported
Transporter 5 EPA ID: Not reported
Transporter 6 EPA ID: Not reported
Transporter 7 EPA ID: Not reported

**CON EDISON (Continued)** **S120669186**

| | |
|---|---|
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

---

**N100** **CON EDISON** **NY MANIFEST** **S117742059**
**SE** **117 RADFORD ST** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.149 mi.**
**787 ft.** **Site 9 of 15 in cluster N**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004753257 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 117 RADFORD ST |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | OPP 117 RADFORD ST |
| Location Address 2: | SB1218 |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PL |
| Mailing Address 2: | 15TH FL |

**CON EDISON (Continued)** **S117742059**

Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: Not reported

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 03/18/2015
Trans1 Recv Date: 03/18/2015
Trans2 Recv Date: Not reported
TSD Site Recv Date: 03/24/2015
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004753257
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 014091138JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 30
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

**N101** **CON EDISON** **NY MANIFEST** **S118258074**
**SSE** **112 RADFORD ST** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.151 mi.**
**795 ft.** **Site 10 of 15 in cluster N**

**Relative:**
**Higher**

**Actual:**
**79 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004810020 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 112 RADFORD ST |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | 112 RADFORD ST |
| Location Address 2: | SB 1218 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Dennis Huacon |
| Mailing Address 1: | 4 IRVING PL 15TH FL |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/21/2015 |
| Trans1 Recv Date: | 07/21/2015 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/23/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004810020 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 014469303JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CON EDISON (Continued)** **S118258074**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 20 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**N102** **CON EDISON** **RCRA NonGen / NLR** **1019905468**
**SSE** **112 RADFORD ST** **NYP004810020**
**1/8-1/4** **YONKERS, NY 10705**
**0.151 mi.**
**795 ft.** **Site 11 of 15 in cluster N**

**Relative:** **Higher**

**Actual:** **79 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20150721 |
| Handler Name: | Con Edison |
| Handler Address: | Radford St |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYP004810020 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |
| State District: | NYSDEC R2 |
| Mailing Address: | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Owner Name: | Not reported |
| Owner Type: | Not reported |
| Operator Name: | Not reported |
| Operator Type: | Not reported |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |

**CON EDISON (Continued)** **1019905468**

| | |
|---|---|
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160909 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20150721 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Large Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20150721 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |

**CON EDISON (Continued)** **1019905468**

State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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**N103** **CON EDISON** **NJ MANIFEST** **S120674186**
**SSE** **112 RADFORD ST** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.151 mi.**
**795 ft.** **Site 12 of 15 in cluster N**

**Relative:** **Higher**
**Actual:** **79 ft.**

NJ MANIFEST:
EPA ID: NYP004810020
Name: CON EDISON
Address: 112 RADFORD ST
City,State,Zip: YONKERS, NY 10705
County: Not reported
Mailing Address: IRVING PL 15TH FL NE
Mailing City,State,Zip: NEW YORK, NY 10003
Telephone: Not reported
Emergency Telephone: Not reported
Contact: THOMAS TEELING
Comments: Not reported
SIC Code: Not reported
County: NY119
Municipal: Not reported
Previous EPAID: Not reported
Generator Flag: Not reported
Transporter Flag: Not reported
TSDF Flag: Not reported
Name Change: Not reported
Date Change: Not reported

Manifest Data:
EPA ID: NYP004810020
Manifest Number: 014469303JJK
Date Shipped: 7/21/2015
TSDF EPA ID: NJD002200046
Transporter EPA ID: NYD006982359
Transporter 2 EPA ID: Not reported
Transporter 3 EPA ID: Not reported
Transporter 4 EPA ID: Not reported

**CON EDISON (Continued)** **S120674186**

| | |
|---|---|
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

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**104**
**SW**
**1/8-1/4**
**0.151 mi.**
**797 ft.**

**REAL ESATE TRANSACTION**
**31 BAYLEY AVE**
**YONKERS, NY**

**NY LTANKS** **S108957778**
**N/A**

**Relative:**
**Higher**

**Actual:**
**86 ft.**

LTANKS:

| | |
|---|---|
| Name: | REAL ESATE TRANSACTION |
| Address: | 31 BAYLEY AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0707651 / 2013-01-30 |
| Facility ID: | 0707651 |
| Site ID: | 388382 |
| Spill Date: | 2007-10-11 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C5 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2007-10-11 |
| CID: | 744 |
| Water Affected: | Not reported |

**REAL ESATE TRANSACTION (Continued)** **S108957778**

| | |
|---|---|
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2007-10-11 |
| Spill Record Last Update: | 2022-09-23 |
| Spiller Name: | REAL ESTATE- HABA |
| Spiller Company: | REAL ESATE TRANSACTION |
| Spiller Address: | 31 BAYLEY AVE |
| Spiller County: | 001 |
| Spiller Contact: | REAL ESTATE- HABA |
| Spiller Phone: | (914) 725-9344 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 337896 |
| Latitude: | 40.9176517 |
| Longitude: | -73.9028785 |
| DEC Memo: | 4/15/09: Review of open spills. TTF for buyer in real estate transaction. No contact information for owner received from caller. No record of any call-backs being made on the spill report or database. jod 1/30/2013 With Albany Approval all Homeowner TTF failures greater then 5 years old can be closed NFA JO'M |
| Remarks: | UNCOVER REPAIR AND TEST |

All TTF:

| | |
|---|---|
| Facility ID: | 0707651 |
| Spill Number: | 0707651 |
| Spill Tank Test: | 1815616 |
| Site ID: | 388382 |
| Tank Number: | 1 |
| Tank Size: | 1000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 388382 |
| Operable Unit ID: | 1145557 |
| Operable Unit: | 01 |
| Material ID: | 2135892 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |

**REAL ESATE TRANSACTION (Continued)** **S108957778**

Oxygenate: Not reported

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**O105** **CONSOLIDATED EDISON COMPANY OF NY C/O ACV ENVIRO** **E MANIFEST** **1031973266**
**East** **POST ST & ELLIOT ST** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.153 mi.**
**808 ft.** **Site 6 of 8 in cluster O**

**Relative:**
**Higher**

**Actual:**
**77 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 007224113GBF |
| Last Updated Date: | 20221003 |
| Shipped Date: | 20220921 |
| Received Date: | 20220923 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Consolidated Edison Company Of Ny C/O Acv Enviro |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | POST ST & ELLIOT ST |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10701 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 928 E HAZELWOOD AVE |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | RAHWAY |
| Generator Mail Zip: | 07065 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | KEARNY |
| Designated Facility Location Zip: | 07032 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

Transporter:

| | |
|---|---|
| Manifest Tracking Number: | 007224113GBF |
| Transporter Line Number: | 1 |
| Transporter EPA ID: | NJD003812047 |
| Transporter Name: | Acv Environmental Services Inc. |

**CONSOLIDATED EDISON COMPANY OF NY C/O ACV ENVIRO (Continued)** **1031973266**

Waste Line:

| | |
|---|---|
| Manifest Tracking Number: | 007224113GBF |
| Waste Line Number: | 1 |
| U.S. DOT Hazardous Indicator: | Y |
| U.S. DOT ID Number: | NA3082 |
| U.S. DOT Description: | Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq |
| Non-Hazardous Waste Description: | Not reported |
| Number of Containers: | 1 |
| Container Type Code: | TT |
| Container Type Description: | Cargo tanks (tank trucks) |
| Waste Quantity: | 2000 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 1 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 1 |
| Waste Quantity, in Kilograms: | 907.03 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 907.03 |
| Management Method Code: | H110 |
| Management Method Description: | STABILIZATION |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | D008 |
| Quantity Haz Kg: | 907.03 |
| Quantity Haz Tons: | 1 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-T |

---

**Q106** **78 LANA REALTY LLC** **NY UST** **U004439280**
**South** **78 ST ANDREWS PLACE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.155 mi.**
**819 ft.** **Site 1 of 4 in cluster Q**

**Relative:** **Higher**
**Actual:** **90 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | 78 LANA REALTY LLC |
| Address: | 78 ST ANDREWS PLACE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-800464 / Unregulated: <1101 gal. PBS |
| Operator Name: | Anton Jankovic |
| Owner Name: | 78 Lana Realty LLC |
| Owner Street: | P.O. Box 141 |
| Owner Address2: | Not reported |

**78 LANA REALTY LLC (Continued)** **U004439280**

| | |
|---|---|
| Owner City: | Bronxville |
| Owner State: | NY |
| Owner Zipcode: | 10708 |
| GDS Number: | Not reported |
| | |
| Tank Number: | 001 |
| Status: | 3. Closed - Removed |
| Capacity: | 1500 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | 02/16/2005 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 3. Aboveground/underground combination |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 5. Vent Whistle |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | Not reported |
| Dispenser: | 2. Suction |
| | |
| Tank Number: | 2 |
| Status: | 1. In-Service |
| Capacity: | 330 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | Not reported |
| Tank Location: | Not reported |
| Tank Type: | Not reported |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | Not reported |
| Piping Location: | 0. No Pipiing |
| Piping Type: | 0. No Pippping |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |
| | |
| Tank Number: | 2 |
| Status: | 1. In-Service |
| Capacity: | 330 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | Not reported |

**78 LANA REALTY LLC (Continued)** **U004439280**

| | |
|---|---|
| Tank Location: | Not reported |
| Tank Type: | Not reported |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | Not reported |
| Piping Location: | 0. No Pipiing |
| Piping Type: | 0. No Pippping |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

| | |
|---|---|
| Tank Number: | 3 |
| Status: | 1. In-Service |
| Capacity: | 330 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | Not reported |
| Tank Location: | Not reported |
| Tank Type: | Not reported |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | Not reported |
| Piping Location: | 0. No Pipiing |
| Piping Type: | 0. No Pippping |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

| | |
|---|---|
| Tank Number: | 3 |
| Status: | 1. In-Service |
| Capacity: | 330 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | Not reported |
| Tank Location: | Not reported |
| Tank Type: | Not reported |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | Not reported |
| Piping Location: | 0. No Pipiing |
| Piping Type: | 0. No Pippping |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

**Q107** **TTF** **NY LTANKS** **S106866671**
**South** **78 ST ANDREWS PLACE** **NY Spills** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.155 mi.**
**819 ft.** **Site 2 of 4 in cluster Q**

**Relative:**
**Higher**

**Actual:**
**90 ft.**

LTANKS:

| | |
|---|---|
| Name: | TTF |
| Address: | 78 ST ANDREWS PLACE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0301532 / 2003-06-30 |
| Facility ID: | 0301532 |
| Site ID: | 165750 |
| Spill Date: | 2003-05-09 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | WCHD |
| Referred To: | WESTCHESTER CNTY HEALTH DEPT |
| Reported to Dept: | 2003-05-12 |
| CID: | 418 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2003-05-12 |
| Spill Record Last Update: | 2018-06-19 |
| Spiller Name: | Not reported |
| Spiller Company: | UNKNOWN |
| Spiller Address: | Not reported |
| Spiller County: | 001 |
| Spiller Contact: | NICK MARKOLA |
| Spiller Phone: | (212) 847-6854 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 207080 |
| Latitude: | 40.9171017 |
| Longitude: | -73.9002786 |
| DEC Memo: | Not reported |
| Remarks: | needs a new fill pipe |

All Materials:

| | |
|---|---|
| Site ID: | 165750 |
| Operable Unit ID: | 867931 |
| Operable Unit: | 01 |
| Material ID: | 506024 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

**TTF (Continued)** **S106866671**

| | |
|---|---|
| Name: | 78 ST ANDREWS PLACE |
| Address: | 78 ST ANDREWS PLACE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0407265 / 2005-05-06 |
| Facility ID: | 0407265 |
| Site ID: | 252804 |
| Spill Date: | 2004-09-30 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODee |
| Referred To: | WCHD |
| Reported to Dept: | 2004-09-30 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2004-09-30 |
| Spill Record Last Update: | 2005-05-06 |
| Spiller Name: | NICK MARKOLA |
| Spiller Company: | Not reported |
| Spiller Address: | 78 ST ANDREWS PLACE |
| Spiller County: | 001 |
| Spiller Contact: | NICK MARKOLA |
| Spiller Phone: | (917) 853-9687 |
| Spiller Extention: | CELL |
| DEC Region: | 3 |
| DER Facility ID: | 207080 |
| Latitude: | 40.9171017 |
| Longitude: | -73.9002786 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was SEE SPILL 04-1256. jod |
| Remarks: | FAILED FOR ULEDGE |

All TTF:

| | |
|---|---|
| Facility ID: | 0407265 |
| Spill Number: | 0407265 |
| Spill Tank Test: | 1529723 |
| Site ID: | 252804 |
| Tank Number: | 1 |
| Tank Size: | 1500 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

**TTF (Continued)** **S106866671**

All Materials:

| | |
|---|---|
| Site ID: | 252804 |
| Operable Unit ID: | 890538 |
| Operable Unit: | 01 |
| Material ID: | 485102 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | Not reported |
| Recovered: | .00 |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | MARKOLA |
| Address: | 78 ST ANDREWS PLACE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0412256 / 2005-05-03 |
| Facility ID: | 0412256 |
| Facility Type: | ER |
| DER Facility ID: | 207080 |
| Site ID: | 337683 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | B4 |
| SWIS: | 6018 |
| Spill Date: | 2005-02-16 |
| Investigator: | TDGHIOSA |
| Referred To: | WCHD |
| Reported to Dept: | 2005-02-16 |
| CID: | 410 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-02-16 |
| Spill Record Last Update: | 2023-10-27 |
| Spiller Name: | ANTON MARKOLA |
| Spiller Company: | Markola |
| Spiller Address: | 778 ST ANDREWS PLACE |
| Spiller Company: | 001 |
| Contact Name: | ANTON MARKOLA |
| Latitude: | 40.9171017 |
| Longitude: | -73.9002786 |
| DEC Memo: | PBS 3-800464 5/6/05: Letter to Nick Markola, 78 Lana Realty LLC from Wayne Schneider, WCDOH dated 3May2005. Closure report has been reviewed. WCDOH requires NFA at this time. |
| Remarks: | REMOVING TANK AND FOUND THE CONTAIMINATION, IN PROCESS OF BEING |

**TTF (Continued)** **S106866671**

CLEANED UP

All Materials:

| | |
|---|---|
| Site ID: | 337683 |
| Operable Unit ID: | 1099712 |
| Operable Unit: | 01 |
| Material ID: | 579943 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**N108** **CON EDISON** **NY MANIFEST** **S117739136**
**SE** **F/O 115 RADFORD ST** **N/A**
**1/8-1/4** **YONKERS, NY 10801**
**0.156 mi.**
**825 ft.** **Site 13 of 15 in cluster N**

**Relative:**
**Higher**

**Actual:**
**80 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004722336 |
| Country: | USA |
| Name: | Con Edison |
| Address: | F/O 115 RADFORD ST |
| Address 2: | SB1221 |
| City,State,Zip: | YONKERS, NY 10801 |
| Zip 4: | Not reported |
| Location Address 1: | F/O 115 RADFORD ST |
| Location Address 2: | SB1221 |
| Location City,State,Zip: | YONKERS, NY 10801 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PL |
| Mailing Address 2: | 15TH FL |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/31/2015 |
| Trans1 Recv Date: | 01/31/2015 |
| Trans2 Recv Date: | Not reported |

**CON EDISON (Continued)** **S117739136**

| | |
|---|---|
| TSD Site Recv Date: | 02/09/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004722336 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 014161925JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 25 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

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**R109** **CON EDISON MANHOLE 1097** **RCRA NonGen / NLR** **1014918015**
**NE** **59 HAMILTON AVE** **NJ MANIFEST** **NYP004215984**
**1/8-1/4** **YONKERS, NY 10701**
**0.156 mi.**
**826 ft.** **Site 1 of 12 in cluster R**

**Relative:** **Higher**
**Actual:** **69 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20101020 |
| Handler Name: | Con Edison Manhole 1097 |
| Handler Address: | Hamilton Ave |
| Handler City,State,Zip: | YONKERS, NY 10701 |
| EPA ID: | NYP004215984 |
| Contact Name: | CHRISTOPHER BLAICH |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 914-925-6219 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |

**CON EDISON MANHOLE 1097 (Continued)** **1014918015**

| | | |
|---|---|---|
| Contact Title: | | SR SPECIALIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL RM 828 |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20110701 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

**CON EDISON MANHOLE 1097 (Continued)** **1014918015**

Historic Generators:

| | |
|---|---|
| Receive Date: | 20100920 |
| Handler Name: | CON EDISON MANHOLE 1097 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20101020 |
| Handler Name: | CON EDISON MANHOLE 1097 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004215984 |
| Name: | CON EDISON MANHOLE 1097 |
| Address: | 59 HAMILTON AVE |
| City,State,Zip: | YONKERS, NY 10701 |
| County: | Not reported |
| Mailing Address: | IRVING PL RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | CHRISTOPHER BLAICH |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |

**CON EDISON MANHOLE 1097 (Continued)** **1014918015**

| | |
|---|---|
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004215984 |
| Manifest Number: | 003533473JJK |
| Date Shipped: | 09/20/2010 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 09/20/2010 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 09/22/2010 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 85 |
| Unit: | P |

**N110** **CON EDISON** **NY MANIFEST** **S117739139**
**SE** **110 RADFORD ST & CLIFF AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.156 mi.**
**826 ft.** **Site 14 of 15 in cluster N**

**Relative:**
**Higher**

**Actual:**
**79 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004722369 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 110 RADFORD ST & CLIFF AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | F/O 112 RADFORD ST |
| Location Address 2: | SB1218 |
| Location City,State,Zip: | YONKERS, NY 10801 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PL |
| Mailing Address 2: | 15TH FL |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/31/2015 |
| Trans1 Recv Date: | 01/31/2015 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 02/04/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004722369 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 014161914JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CON EDISON (Continued)** **S117739139**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 30 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**N111** **CON EDISON** **NJ MANIFEST** **S120666455**
**SE** **110 RADFORD ST & CLIFF AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.156 mi.**
**826 ft.** **Site 15 of 15 in cluster N**

**Relative:** **Higher**

**Actual:** **79 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004722369 |
| Name: | CON EDISON |
| Address: | 110 RADFORD ST & CLIFF AVE |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004722369 |
| Manifest Number: | 014161914JJK |
| Date Shipped: | 1/31/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |

**CON EDISON (Continued)** **S120666455**

| | |
|---|---|
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

---

**L112** **RIVERDALE CLEANERS** **RCRA NonGen / NLR** **1004760182**
**SSW** **434 RIVERDALE AVE** **ICIS** **NYR000034926**
**1/8-1/4** **YONKERS, NY 10705** **US AIRS**
**0.157 mi.** **NY DRYCLEANERS**
**827 ft.** **Site 9 of 10 in cluster L** **NY MANIFEST**

**Relative:** **Higher**

**Actual:** **88 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20070101 |
| Handler Name: | Riverdale Cleaners |
| Handler Address: | Riverdale Ave |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYR000034926 |
| Contact Name: | SEDONG JIN |
| Contact Address: | RIVERDALE AVE |
| Contact City,State,Zip: | YONKERS, NY 10705 |
| Contact Telephone: | 914-964-8309 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Not reported |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |

**RIVERDALE CLEANERS (Continued)** **1004760182**

| | | |
|---|---|---|
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R3 |
| Mailing Address: | | RIVERDALE AVE |
| Mailing City,State,Zip: | | YONKERS, NY 10705 |
| Owner Name: | Sedong Jin | |
| Owner Type: | | Private |
| Operator Name: | Sedong Jin | |
| Operator Type: | | Private |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20150414 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Hazardous Waste Summary:

| | |
|---|---|
| Waste Code: | D000 |
| Waste Description: | Not Defined |

**RIVERDALE CLEANERS (Continued)** **1004760182**

Waste Code: D007
Waste Description: Chromium

Waste Code: D008
Waste Description: Lead

Waste Code: D039
Waste Description: Tetrachloroethylene

Waste Code: D040
Waste Description: Trichloroethylene

Waste Code: F001
Waste Description: The Following Spent Halogenated Solvents Used In Degreasing: Tetrachloroethylene, Trichlorethylene, Methylene Chloride, 1,1,1-Trichloroethane, Carbon Tetrachloride And Chlorinated Fluorocarbons; All Spent Solvent Mixtures/Blends Used In Degreasing Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F002, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.

Waste Code: F002
Waste Description: The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.

Handler - Owner Operator:
Owner/Operator Indicator: Owner
Owner/Operator Name: SEDONG JIN
Legal Status: Private
Date Became Current: 20010101
Date Ended Current: Not reported
Owner/Operator Address: 434 RIVERDALE AVE
Owner/Operator City,State,Zip: YONKERS, NY 10705
Owner/Operator Telephone: 914-964-8309
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: SEDONG JIN
Legal Status: Private
Date Became Current: 20010101
Date Ended Current: Not reported
Owner/Operator Address: 434 RIVERDALE AVE
Owner/Operator City,State,Zip: YONKERS, NY 10705
Owner/Operator Telephone: 914-964-8309
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

**RIVERDALE CLEANERS (Continued)** **1004760182**

Owner/Operator Indicator: Owner
Owner/Operator Name: SEDONG JIN
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 434 RIVERDALE AVE
Owner/Operator City,State,Zip: YONKERS, NY 10705
Owner/Operator Telephone: 914-964-8309
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 20060101
Handler Name: RIVERDALE CLEANERS
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20070101
Handler Name: RIVERDALE CLEANERS
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19970128
Handler Name: RIVERDALE CLEANERS
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20010716
Handler Name: RIVERDALE CLEANERS
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator

**RIVERDALE CLEANERS (Continued)** **1004760182**

State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

ICIS:
Enforcement Action ID: NY000A0000355180077300320
FRS ID: 110004532006
Action Name: RIVERDALE CLEANERS 36119R208200320
Facility Name: RIVERDALE CLEANERS
Facility Address: 434 RIVERDALE AVE
YONKERS, NY 107052908
Enforcement Action Type: Notice of Violation
Facility County: WESTCHESTER
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 7216
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.917264
Longitude in Decimal Degrees: -73.901624
Permit Type Desc: Not reported
Program System Acronym: NY0000003551800773
Facility NAICS Code: 812320
Tribal Land Code: Not reported

Enforcement Action ID: NY000A0000355180077300306
FRS ID: 110004532006
Action Name: RIVERDALE CLEANERS 36119R208200306
Facility Name: RIVERDALE CLEANERS
Facility Address: 434 RIVERDALE AVE
YONKERS, NY 107052908
Enforcement Action Type: Notice of Violation
Facility County: WESTCHESTER
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 7216
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 40.917264

**RIVERDALE CLEANERS (Continued)** **1004760182**

Longitude in Decimal Degrees: -73.901624
Permit Type Desc: Not reported
Program System Acronym: NY0000003551800773
Facility NAICS Code: 812320
Tribal Land Code: Not reported

US AIRS MINOR:
Envid: 1004760182
Region Code: 02
Programmatic ID: AIR NY0000003551800773
Facility Registry ID: 110004532006
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:
Region Code: 02
Programmatic ID: AIR NY0000003551800773
Facility Registry ID: 110004532006
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: Not reported
Activity Status Date: 2014-10-19 00:00:00
Activity Group: Case File
Activity Type: Case File
Activity Status: Case File Data Entered

Region Code: 02
Programmatic ID: AIR NY0000003551800773
Facility Registry ID: 110004532006
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2011-12-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 02
Programmatic ID: AIR NY0000003551800773
Facility Registry ID: 110004532006
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2005-09-12 00:00:00
Activity Status Date: 2005-09-12 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

**RIVERDALE CLEANERS (Continued)** **1004760182**

Region Code: 02
Programmatic ID: AIR NY0000003551800773
Facility Registry ID: 110004532006
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2012-07-03 00:00:00
Activity Status Date: 2012-07-03 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

Region Code: 02
Programmatic ID: AIR NY0000003551800773
Facility Registry ID: 110004532006
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards
Activity Date: 2011-12-21 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

DRYCLEANERS:
Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/27/2001
Inspection Date: 12/14/2006
Install Date: Not reported
Expiration Date: 06/19/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/27/2001
Inspection Date: 12/15/2005
Install Date: Not reported
Expiration Date: 06/19/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

**RIVERDALE CLEANERS (Continued)** **1004760182**

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/27/2001 |
| Inspection Date: | 12/11/2008 |
| Install Date: | Not reported |
| Expiration Date: | 06/19/2003 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/27/2001 |
| Inspection Date: | 12/14/2009 |
| Install Date: | Not reported |
| Expiration Date: | 06/19/2003 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/27/2001 |
| Inspection Date: | 12/21/2011 |
| Install Date: | Not reported |
| Expiration Date: | 06/19/2003 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/27/2001 |
| Inspection Date: | 12/14/2010 |
| Install Date: | Not reported |

**RIVERDALE CLEANERS (Continued)** **1004760182**

| | |
|---|---|
| Expiration Date: | 06/19/2003 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/27/2001 |
| Inspection Date: | 12/01/2012 |
| Install Date: | Not reported |
| Expiration Date: | 06/19/2003 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/27/2001 |
| Inspection Date: | 12/20/2012 |
| Install Date: | Not reported |
| Expiration Date: | 06/19/2003 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/27/2001 |
| Inspection Date: | 12/17/2013 |
| Install Date: | Not reported |
| Expiration Date: | 06/19/2003 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |

**RIVERDALE CLEANERS (Continued)** **1004760182**

City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/27/2001
Inspection Date: 12/17/2014
Install Date: Not reported
Expiration Date: 06/19/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/27/2001
Inspection Date: 12/17/2015
Install Date: Not reported
Expiration Date: 06/19/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/19/2003
Inspection Date: 12/06/2001
Install Date: Not reported
Expiration Date: 08/12/2016
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/19/2003
Inspection Date: 12/06/2002
Install Date: Not reported
Expiration Date: 08/12/2016
Removal Date: Not reported

**RIVERDALE CLEANERS (Continued)** **1004760182**

Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/19/2003
Inspection Date: 12/04/2003
Install Date: Not reported
Expiration Date: 08/12/2016
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/19/2003
Inspection Date: 12/03/2004
Install Date: Not reported
Expiration Date: 08/12/2016
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/19/2003
Inspection Date: 12/15/2005
Install Date: Not reported
Expiration Date: 08/12/2016
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773

**RIVERDALE CLEANERS (Continued)** **1004760182**

| | |
|---|---|
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/19/2003 |
| Inspection Date: | 12/14/2006 |
| Install Date: | Not reported |
| Expiration Date: | 08/12/2016 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/19/2003 |
| Inspection Date: | 12/13/2007 |
| Install Date: | Not reported |
| Expiration Date: | 08/12/2016 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/19/2003 |
| Inspection Date: | 12/11/2008 |
| Install Date: | Not reported |
| Expiration Date: | 08/12/2016 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/19/2003 |
| Inspection Date: | 12/14/2009 |
| Install Date: | Not reported |
| Expiration Date: | 08/12/2016 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |

**RIVERDALE CLEANERS (Continued)** **1004760182**

Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/19/2003
Inspection Date: 12/21/2011
Install Date: Not reported
Expiration Date: 08/12/2016
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/19/2003
Inspection Date: 12/14/2010
Install Date: Not reported
Expiration Date: 08/12/2016
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/19/2003
Inspection Date: 12/01/2012
Install Date: Not reported
Expiration Date: 08/12/2016
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported

**RIVERDALE CLEANERS (Continued)** **1004760182**

Registration Effective Date: 06/19/2003
Inspection Date: 12/20/2012
Install Date: Not reported
Expiration Date: 08/12/2016
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/19/2003
Inspection Date: 12/17/2013
Install Date: Not reported
Expiration Date: 08/12/2016
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/19/2003
Inspection Date: 12/17/2014
Install Date: Not reported
Expiration Date: 08/12/2016
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/19/2003
Inspection Date: 12/17/2015
Install Date: Not reported
Expiration Date: 08/12/2016
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

**RIVERDALE CLEANERS (Continued)** **1004760182**

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 08/23/2018
Inspection Date: 12/06/2001
Install Date: Not reported
Expiration Date: 03/10/2020
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 08/23/2018
Inspection Date: 12/06/2002
Install Date: Not reported
Expiration Date: 03/10/2020
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 08/23/2018
Inspection Date: 12/04/2003
Install Date: Not reported
Expiration Date: 03/10/2020
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 08/23/2018
Inspection Date: 12/03/2004
Install Date: Not reported

**RIVERDALE CLEANERS (Continued)** **1004760182**

| | |
|---|---|
| Expiration Date: | 03/10/2020 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 08/23/2018 |
| Inspection Date: | 12/15/2005 |
| Install Date: | Not reported |
| Expiration Date: | 03/10/2020 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 08/23/2018 |
| Inspection Date: | 12/14/2006 |
| Install Date: | Not reported |
| Expiration Date: | 03/10/2020 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 08/23/2018 |
| Inspection Date: | 12/13/2007 |
| Install Date: | Not reported |
| Expiration Date: | 03/10/2020 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |

**RIVERDALE CLEANERS (Continued)** **1004760182**

City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 08/23/2018
Inspection Date: 12/11/2008
Install Date: Not reported
Expiration Date: 03/10/2020
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 08/23/2018
Inspection Date: 12/14/2009
Install Date: Not reported
Expiration Date: 03/10/2020
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 08/23/2018
Inspection Date: 12/21/2011
Install Date: Not reported
Expiration Date: 03/10/2020
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 08/23/2018
Inspection Date: 12/14/2010
Install Date: Not reported
Expiration Date: 03/10/2020
Removal Date: Not reported

**RIVERDALE CLEANERS (Continued)** **1004760182**

Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 08/23/2018
Inspection Date: 12/01/2012
Install Date: Not reported
Expiration Date: 03/10/2020
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 08/23/2018
Inspection Date: 12/20/2012
Install Date: Not reported
Expiration Date: 03/10/2020
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 08/23/2018
Inspection Date: 12/17/2013
Install Date: Not reported
Expiration Date: 03/10/2020
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773

**RIVERDALE CLEANERS (Continued)** **1004760182**

| | |
|---|---|
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 08/23/2018 |
| Inspection Date: | 12/17/2014 |
| Install Date: | Not reported |
| Expiration Date: | 03/10/2020 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 08/23/2018 |
| Inspection Date: | 12/17/2015 |
| Install Date: | Not reported |
| Expiration Date: | 03/10/2020 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/27/2001 |
| Inspection Date: | 12/13/2007 |
| Install Date: | Not reported |
| Expiration Date: | 06/19/2003 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | MY RIVERDALE CLEANERS CORP |
| Address: | 434 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2908 |
| Facility ID: | 3-5518-00773 |
| Phone Number: | Not reported |
| Region: | Not reported |
| Registration Effective Date: | 06/27/2001 |
| Inspection Date: | 12/03/2004 |
| Install Date: | Not reported |
| Expiration Date: | 06/19/2003 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |

**RIVERDALE CLEANERS (Continued)** **1004760182**

Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/27/2001
Inspection Date: 12/04/2003
Install Date: Not reported
Expiration Date: 06/19/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/27/2001
Inspection Date: 12/06/2002
Install Date: Not reported
Expiration Date: 06/19/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

Name: MY RIVERDALE CLEANERS CORP
Address: 434 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2908
Facility ID: 3-5518-00773
Phone Number: Not reported
Region: Not reported
Registration Effective Date: 06/27/2001
Inspection Date: 12/06/2001
Install Date: Not reported
Expiration Date: 06/19/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: DF-2000; CAS 64742-48-9, synthetic hydrocarbon, ExxonMobil
Current Business: Not reported

NY MANIFEST:
EPA ID: NYR000034926
Country: USA
Name: Dynasty Cleaners
Address: 434 RIVERDALE AVE
Address 2: Not reported

**RIVERDALE CLEANERS (Continued)** **1004760182**

City,State,Zip: YONKERS, NY 10705
Zip 4: Not reported
Location Address 1: 434 RIVERDALE AVE
Location Address 2: Not reported
Location City,State,Zip: YONKERS, NY 10701
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Dynasty Cleaners
Mailing Contact: Regino Ortiz
Mailing Address 1: 434 RIVERDALE AVE
Mailing Address 2: Not reported
Mailing City,State,Zip: YONKERS, NY 10701
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 9149648615

Manifest Data:
Document ID: CTF0692050
Manifest Status: Not reported
Trans1 State ID: NYCR2436
Year: 1998
Trans2 State ID: Not reported
Generator Ship Date: 03/18/1998
Trans1 Recv Date: 03/18/1998
Trans2 Recv Date: Not reported
TSD Site Recv Date: 03/20/1998
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYR000034926
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: Not reported
TSDF ID 1: CTD001156009
TSDF ID 2: Not reported
Manifest Tracking Number: Not reported
Import Indicator: Not reported
Export Indicator: Not reported
Discr Quantity Indicator: Not reported
Discr Type Indicator: Not reported
Discr Residue Indicator: Not reported
Discr Partial Reject Indicator: Not reported
Discr Full Reject Indicator: Not reported
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: Not reported
Waste Code 1: The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And

**RIVERDALE CLEANERS (Continued)** **1004760182**

Spent Solvent Mixtures.
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 00195
Units: Pounds
Number of Containers: 001
Container Type: Fiberboard or plastic drums, barrels, kegs
Handling Method: Burn
Specific Gravity: 01.00

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**L113** **RIVERDALE DRY CLEANERS** **NY SHWS** **S125896311**
**SSW** **436-440 RIVERDALE AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.158 mi.**
**832 ft.** **Site 10 of 10 in cluster L**

**Relative:** SHWS:
**Higher**
Name: RIVERDALE DRY CLEANERS
**Actual:** Address: 436-440 RIVERDALE AVENUE
**88 ft.** City,State,Zip: YONKERS, NY 10705
Program: HW
Site Code: 598397
Classification: Significant threat to the public health or environment - action required.
Region: 3
Acres: 0.196
HW Code: 360197
Record Add: 11/15/2019
Record Upd: 08/27/2024
Updated By: AMSERVIS
Site Description: Site Location: The site is located on the corner of Riverdale Avenue and St. Andrews Place in the City of Yonkers, Westchester County. The site is bordered to the south by St. Andrews Place, to the east by residential and commercial buildings, to the north by a mixed commercial and residential building, and to the west by Riverdale Ave. Site Features: The site is 0.2 acres in size and is located on a single tax lot (1.-132-14.16). The site has approximately 120 feet of road frontage along both Riverdale Avenue and St. Andrews Place. The site is developed with a commercial building currently occupied by a non-retail appliance storage space, a laundromat, nail spa, restaurant, deli, and a supermarket. Current Zoning and Land Use: The site is in a city restricted business zone (BR). The restricted business zone excludes residential land use. Past Use of the Site: A portion of the site historically operated as a full-service dry-cleaning facility from approximately 2000 through 2014. Site Geology and Hydrogeology: The site topography slopes to the west and groundwater flow in the area is anticipated to flow to the west towards the Hudson River. Shallow groundwater was encountered during a subsurface investigation beneath a neighboring structure to the north of the site.
Env Problem: Nature and Extent of Contamination: A subsurface soil vapor investigation was completed at the neighboring property to the north of the site (432 Riverdale Avenue) in April 2018. Elevated levels of volatile organic compounds (VOCs) were encountered during this

**RIVERDALE DRY CLEANERS (Continued)** **S125896311**

investigation in both indoor air and sub-slab soil vapor samples. Contaminants of concern include tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (DCE), and methylene chloride. A sub-slab depressurization system (SSDS) was installed beneath the building at 432 Riverdale Avenue in March 2019. Environmental Assessment: A Site Characterization (SC) was performed at the site in the Spring of 2022. Soil, groundwater, and soil vapor were analyzed for VOCs. Based on the investigations completed to date, tetrachloroethene (PCE) and associated breakdown compounds are the primary contaminants of concern. Soil: No soil samples were detected above Unrestricted SCOs. Groundwater: Groundwater sample concentrations of PCE up to 32.1 parts per billion (ppb), trichloroethene (TCE) up to 7.38 ppb, and cis-1,2-dichloroethylene (DCE) up to 48.6 ppb were detected on-site. PCE, TCE, and DCE all exceeded their respective Ambient Water Quality Standards and Guidance Values of 5 ppb. Downgradient groundwater samples were not collected as part of previous sampling events for this site. All detections of PCE, TCE, and DEC were from the northwest portion of the site, in the furthest downgradient sample location. The nature and extent of off-site groundwater impacts will be further explored as part of upcoming remedial investigation work. Sub-slab Soil Vapor & Indoor Air: PCE, TCE, and/or DCE were detected in each sub-slab vapor sample and indoor air sample. The highest concentrations of PCE in the sub-slab and indoor air samples was 58.8 g/m3 and 5.93 g/m3, respectively. These concentrations were detected along Saint Andrews Place. PCE detections in the samples closest to the former dry cleaner were 3.58 g/m3 in sub-slab soil vapor and 1.35 g/m3 in indoor air. A comparison of these results to the New York State Department of Health Soil Vapor Matrices indicates no further action. The neighboring property to the north operates a sub-slab depressurization system, which was operating at the time of sampling and may be contributing to the soil vapor intrusion results for the former dry cleaner location. In November 2022 a follow up soil vapor intrusion investigation was completed following the shutdown of the neighboring sub-slab depressurization system. Samples were collected from inside the neighboring property to the north, 432 Riverdale Avenue, and detected PCE up to 8,100 g/m3, TCE up to 850 g/m3, and DCE up to 6,800 g/m3. These detections were all collected from the southern boundary of the property, closest to the former dry cleaners and indicate that further mitigation is necessary for 432 Riverdale Avenue.

Health Problem: Direct contact with contaminants in soil is unlikely because the majority of the site is covered with a building and asphalt pavement. Contaminated groundwater at the site is not used for drinking or other purposes, and the area is served by a public water supply that obtains water from a different source not affected by site-related contamination. Volatile organic compounds in soil vapor (air spaces within the soil) may move into buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion sampling identified impacts to indoor air quality within an adjacent, off-site building. A sub-slab depressurization system (a system ventilates/removes the air beneath a building) was installed in this off-site building to address exposure associated with soil vapor intrusion. Additional investigation is needed to evaluate whether actions are needed to address soil vapor intrusion on-site and in other off-site buildings.

**RIVERDALE DRY CLEANERS (Continued)** **S125896311**

| | |
|---|---|
| Dump: | False |
| Structure: | False |
| Lagoon: | False |
| Landfill: | False |
| Pond: | False |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | Not reported |
| Dell: | Not reported |
| Record Add: | 2024-04-12 09:38:00 |
| Record Upd: | 2024-04-12 09:38:00 |
| Updated By: | MRDOMARA |
| Own Op: | 4 |
| Sub Type: | 08 |
| Owner Name: | Evelyn |
| Owner Company: | Fancy Spa + Nails by Evelyn |
| Owner Address: | 438 Riverdale Avenue |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10705 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | 03 |
| Owner Name: | Norman Mirsky |
| Owner Company: | Fay Realty Inc |
| Owner Address: | PO Box 618 |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Remsenburg, NY 11960 |
| Owner Country: | United States of America |
| Own Op: | 4 |
| Sub Type: | 08 |
| Owner Name: | Owner |
| Owner Company: | El Valle Restaurant |
| Owner Address: | 440 Riverdale Avenue |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10705 |
| Owner Country: | United States of America |
| Own Op: | 4 |
| Sub Type: | 08 |
| Owner Name: | Owner |
| Owner Company: | Lorena Mex Mini Market |
| Owner Address: | 436 Riverdale Avenue |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10705 |
| Owner Country: | United States of America |
| Own Op: | 4 |
| Sub Type: | 08 |
| Owner Name: | Owner |
| Owner Company: | JM Deli & Meat Market Co |
| Owner Address: | 442 Riverdale Avenue |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10705 |
| Owner Country: | United States of America |
| HW Code: | 360197 |
| Waste Type: | trichloroethene (TCE) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | 360197 |

**RIVERDALE DRY CLEANERS (Continued)** **S125896311**

| | |
|---|---|
| Waste Type: | tetrachloroethene (PCE) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | 360197 |
| Waste Type: | 1,2-dichloroethene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| Crossref ID: | 1907133 |
| Cross Ref Type Code: | 01 |
| Cross Ref Type: | Spill No. |
| Record Added Date: | 2019-11-18 14:18:00 |
| Record Updated: | 2019-11-19 14:42:00 |
| Updated By: | MDKILMER |
| Crossref ID: | CO3-20191223-299 |
| Cross Ref Type Code: | 23 |
| Cross Ref Type: | Agreement/Consent Order Number |
| Record Added Date: | 2023-09-20 08:10:00 |
| Record Updated: | 2023-09-20 08:10:00 |
| Updated By: | CSMONACO |

---

**R114** **JACOB DAVID LLC** **NY LTANKS** **S116555731**
**NE** **68 HAMILTON AVE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.160 mi.**
**843 ft.** **Site 2 of 12 in cluster R**

**Relative:** **Higher**
**Actual:** **72 ft.**

LTANKS:

| | |
|---|---|
| Name: | JACOB DAVID LLC |
| Address: | 68 HAMILTON AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1400112 / 2014-06-02 |
| Facility ID: | 1400112 |
| Site ID: | 493340 |
| Spill Date: | 2014-04-03 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2014-04-03 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2014-04-03 |
| Spill Record Last Update: | 2014-06-02 |
| Spiller Name: | Not reported |
| Spiller Company: | PROPERTY OWNER |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | DAVID TIDLISZ |
| Spiller Phone: | (917) 439-1353 |

**JACOB DAVID LLC (Continued)** **S116555731**

| | |
|---|---|
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 448224 |
| Latitude: | 40.9215349 |
| Longitude: | -73.8977560 |
| DEC Memo: | 4/3/14 Spoke to Kathy Morgan of US Tank Tech. UST is 1080 gal. Owner says he is going to repair and retest. Mr. Tidlisz says he is thinking of pulling the tank, and I gave him several contractor names and #s. dw 05/27/14 New England Environmental Tank Services reported that they excavated and removed the tank and that no contaminated soil was noted in the excavation. Post excavation soil sample results were below DEC guidance values. NFA. TG |
| Remarks: | repair/retest pending - |

All Materials:

| | |
|---|---|
| Site ID: | 493340 |
| Operable Unit ID: | 1242842 |
| Operable Unit: | 01 |
| Material ID: | 2243416 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**S115** **CONSOLIDATED EDISON COMPANY OF NY INC** **E MANIFEST** **1031974192**
**East** **OPP OF 104 ELLIOTT AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.160 mi.**
**845 ft.** **Site 1 of 14 in cluster S**

**Relative:**
**Higher**

**Actual:**
**79 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 007224028GBF |
| Last Updated Date: | 20220927 |
| Shipped Date: | 20220916 |
| Received Date: | 20220919 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Consolidated Edison Company Of Ny Inc |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | OPP OF 104 ELLIOTT AVE |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 928 E HAZELWOOD AVE |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | RAHWAY |
| Generator Mail Zip: | 07065 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |

**CONSOLIDATED EDISON COMPANY OF NY INC (Continued)** **1031974192**

| | |
|---|---|
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | KEARNY |
| Designated Facility Location Zip: | 07032 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

Transporter:

| | |
|---|---|
| Manifest Tracking Number: | 007224028GBF |
| Transporter Line Number: | 1 |
| Transporter EPA ID: | NJD003812047 |
| Transporter Name: | Acv Environmental Services Inc. |

Waste Line:

| | |
|---|---|
| Manifest Tracking Number: | 007224028GBF |
| Waste Line Number: | 1 |
| U.S. DOT Hazardous Indicator: | Y |
| U.S. DOT ID Number: | NA3082 |
| U.S. DOT Description: | Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq |
| Non-Hazardous Waste Description: | Not reported |
| Number of Containers: | 1 |
| Container Type Code: | TT |
| Container Type Description: | Cargo tanks (tank trucks) |
| Waste Quantity: | 500 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.25 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.25 |
| Waste Quantity, in Kilograms: | 226.7575 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 226.7575 |
| Management Method Code: | H110 |
| Management Method Description: | STABILIZATION |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |

**CONSOLIDATED EDISON COMPANY OF NY INC (Continued)** **1031974192**

| | |
|---|---|
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | D008 |
| Quantity Haz Kg: | 226.7575 |
| Quantity Haz Tons: | 0.25 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-T |

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**S116** **PHELAN PROPERTY** **NY LTANKS** **S109064270**
**East** **104 ELLIOT AVE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.160 mi.**
**845 ft.** **Site 2 of 14 in cluster S**

**Relative:** **Higher**
**Actual:** **79 ft.**

LTANKS:

| | |
|---|---|
| Name: | PHELAN PROPERTY |
| Address: | 104 ELLIOT AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0800856 / 2008-11-24 |
| Facility ID: | 0800856 |
| Site ID: | 396679 |
| Spill Date: | 2008-04-21 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2008-04-21 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | Not reported |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2008-04-21 |
| Spill Record Last Update: | 2008-11-24 |
| Spiller Name: | ATT. JOHN PHELAN |
| Spiller Company: | PRIVATE HOME |
| Spiller Address: | 104 ELLIOT AVE |
| Spiller County: | 001 |
| Spiller Contact: | ATT. JOHN PHELAN |
| Spiller Phone: | (914) 237-5223 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 346156 |
| Latitude: | 40.9198735 |
| Longitude: | -73.8971145 |
| DEC Memo: | The Church across the street is looking to purchase this vacant house and had tank tested. Pro-Test will contact John Phelan, attorney for property and propose EIR. jod 10/20/08 National Environmental Specialists reported that they excavated and removed one 1000 gallon tank. No contamination was noted in the excavation and TAGM soil |

**PHELAN PROPERTY (Continued)** **S109064270**

| | |
|---|---|
| | sample results were below DEC guidance values. Nfa. TG |
| Remarks: | wet leak, tank is almost empty |

All TTF:

| | |
|---|---|
| Facility ID: | 0800856 |
| Spill Number: | 0800856 |
| Spill Tank Test: | 2453559 |
| Site ID: | 396679 |
| Tank Number: | 1 |
| Tank Size: | 1000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | True |
| Cause: | 99 |
| Source: | 01 |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 396679 |
| Operable Unit ID: | 1153649 |
| Operable Unit: | 01 |
| Material ID: | 2144416 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**S117** **CONSOLIDATED EDISON COMPANY OF NY C/O ACV ENVIRO** **E MANIFEST** **1031971351**
**East** **104 ELLIOT AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.160 mi.**
**845 ft.** **Site 3 of 14 in cluster S**

**Relative:**
**Higher**

**Actual:**
**79 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 024111517JJK |
| Last Updated Date: | 20221010 |
| Shipped Date: | 20220929 |
| Received Date: | 20220930 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Consolidated Edison Company Of Ny C/O Acv Enviro |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 104 ELLIOT AVE |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |

**CONSOLIDATED EDISON COMPANY OF NY C/O ACV ENVIRO (Continued)** **1031971351**

| | |
|---|---|
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 928 E HAZELWOOD AVE |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | RAHWAY |
| Generator Mail Zip: | 07065 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | KEARNY |
| Designated Facility Location Zip: | 07032 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

Transporter:

| | |
|---|---|
| Manifest Tracking Number: | 024111517JJK |
| Transporter Line Number: | 1 |
| Transporter EPA ID: | NJD003812047 |
| Transporter Name: | Acv Environmental Services Inc. |

Waste Line:

| | |
|---|---|
| Manifest Tracking Number: | 024111517JJK |
| Waste Line Number: | 1 |
| U.S. DOT Hazardous Indicator: | Y |
| U.S. DOT ID Number: | NA3082 |
| U.S. DOT Description: | Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq |
| Non-Hazardous Waste Description: | Not reported |
| Number of Containers: | 1 |
| Container Type Code: | TT |
| Container Type Description: | Cargo tanks (tank trucks) |
| Waste Quantity: | 500 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.25 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.25 |
| Waste Quantity, in Kilograms: | 226.7575 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 226.7575 |
| Management Method Code: | H110 |
| Management Method Description: | STABILIZATION |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |

**CONSOLIDATED EDISON COMPANY OF NY C/O ACV ENVIRO (Continued)** **1031971351**

| | |
|---|---|
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | D008 |
| Quantity Haz Kg: | 226.7575 |
| Quantity Haz Tons: | 0.25 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-T |

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**T118** **POLICE PRECINCT #3** **NY LTANKS** **S100560427**
**SSW** **435 RIVERDALE AVE** **NY Spills** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.161 mi.**
**848 ft.** **Site 1 of 5 in cluster T**

**Relative:** **Higher**

**Actual:** **97 ft.**

LTANKS:

| | |
|---|---|
| Name: | THIRD POLICE PRECINCT |
| Address: | 435 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9305296 / 1994-05-24 |
| Facility ID: | 9305296 |
| Site ID: | 167835 |
| Spill Date: | 1993-07-26 |
| Spill Cause: | Tank Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | B3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jkomara |
| Referred To: | Not reported |
| Reported to Dept: | 1993-07-29 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | True |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1993-07-30 |
| Spill Record Last Update: | 1999-01-16 |
| Spiller Name: | Not reported |
| Spiller Company: | CITY OF YONKERS |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |

**POLICE PRECINT #3 (Continued)** **S100560427**

DER Facility ID: 141395
Latitude: 40.9172978
Longitude: -73.9017224
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'MARA SITE ASSESSMENT RECEIVED, ALL LEVELS BELOW STARS
Remarks: TANK PULL BOB SPERONI VISITED WHO DETERMINED SITE CLEAN BUT UPON FURTHER INVEST. AND EXCAVATION NOTICED CONTAMINATION DIGGING OUT DIRT WCHD NOTIFIED

All Materials:
Site ID: 167835
Operable Unit ID: 986800
Operable Unit: 01
Material ID: 395228
Material Code: 0009
Material Name: gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: L
Recovered: .00
Oxygenate: Not reported

SPILLS:
Name: POLICE PRECINT #3
Address: 435 RIVERDALE AVE
City,State,Zip: YONKERS, NY
Spill Number/Closed Date: 0612075 / 2008-05-30
Facility ID: 0612075
Facility Type: ER
DER Facility ID: 141395
Site ID: 376853
DEC Region: 3
Spill Cause: Equipment Failure
Spill Class: C3
SWIS: 6018
Spill Date: 2007-02-01
Investigator: jbodee
Referred To: WCDOH
Reported to Dept: 2007-02-01
CID: 406
Water Affected: Not reported
Spill Source: Institutional, Educational, Gov., Other
Spill Notifier: Tank Tester
Cleanup Ceased: Not reported
Cleanup Meets Std: True
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 2007-02-01
Spill Record Last Update: 2008-05-30
Spiller Name: RAY
Spiller Company: POLICE PRECINT #3
Spiller Address: 437 RIVERDALE AVE.
Spiller Company: 001

**POLICE PRECINT #3 (Continued)** **S100560427**

Contact Name: RAY
Latitude: 40.9173432
Longitude: -73.9017071
DEC Memo: May 30, 2008: Tank passed a retest after piping was repaired. Based upon information provided to
DEC, no further action is required at this time. jod
Remarks: PBS No: 3-600673 -PBS No. not found in UIS, may be invalid. Line failure. Double wall line ... material was forced into a liquid tight sump. No impact to the environment. Pump has been closed down. they are out of service. American Petrolium will excavate and either replace or repair the line.

All TTF:
Facility ID: 0612075
Spill Number: 0612075
Spill Tank Test: 1550609
Site ID: 376853
Tank Number: Not reported
Tank Size: 3000
Material: 0009
EPA UST: Not reported
UST: Not reported
Cause: Not reported
Source: Not reported
Test Method: 00
Test Method 2: Unknown
Leak Rate: .00
Gross Fail: Not reported
Modified By: Watchdog
Last Modified Date: Not reported

All Materials:
Site ID: 376853
Operable Unit ID: 1134411
Operable Unit: 01
Material ID: 2124275
Material Code: 0009
Material Name: gasoline
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G
Recovered: .00
Oxygenate: Not reported

---

**T119** **THIRD POLICE PRECINCT** **NY UST** **U004469138**
**SSW** **435 RIVERDALE AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.161 mi.**
**848 ft.** **Site 2 of 5 in cluster T**

**Relative:** **Higher**
**Actual:** **97 ft.**

WESTCHESTER CO. UST:
Name: THIRD POLICE PRECINCT
Address: 435 RIVERDALE AVENUE
City,State,Zip: YONKERS, NY 10701
Id/Status: 3-600673 / Active
Operator Name: Kenneth Greehan

**THIRD POLICE PRECINCT (Continued)** **U004469138**

| | |
|---|---|
| Owner Name: | City of Yonkers - Dept of Public Works |
| Owner Street: | 40 South Broadway |
| Owner Address2: | City Hall - Room 311 |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10701 |
| GDS Number: | 3551800654 |
| | |
| Tank Number: | 75 |
| Status: | 1. In-Service |
| Capacity: | 3000 |
| Product Stored: | 2712. Gasoline/Ethanol |
| Product Stored Percent: | 10 |
| Tank Leak Detection: | 1. Electronic Interstitial Monitoring,5. In-Tank System (auto tank gauge) |
| Date Installation: | 08/01/1993 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 4. Fiberglass coated steel |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 2. Original sacrificial anode,4. Fiberglass |
| Tank Secondary Containment: | 4. Double-Walled (underground only) |
| Piping Location: | 2. Underground/on Ground |
| Piping Type: | 11. Flexible Piping |
| Piping External Protection: | 4. Fiberglass,6. Wrapped (Piping) |
| Overfill Prevention: | 2. High Level Alarm |
| Piping Secondary Containment: | 4. Double-Walled (underground only) |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 2. Suction |

---

**T120** **THIRD POLICE PRECINCT** **UST FINDER RELEASE** **1029059805**
**SSW** **435 RIVERDALE AVE** **N/A**
**1/8-1/4** **YONKERS, NY 0**
**0.161 mi.**
**848 ft.** **Site 3 of 5 in cluster T**

**Relative:** **Higher**
**Actual:** **97 ft.**

UST FINDER RELEASE:

| | |
|---|---|
| Object ID: | 258822 |
| Facility ID: | NY141395 |
| Lust ID: | NY9305296 |
| Name: | THIRD POLICE PRECINCT |
| Address: | 435 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 0 |
| Address Match Type: | Not reported |
| Reported Date: | 1993/07/26 15:59:59+00 |
| Status: | No Further Action |
| Substance: | Not reported |
| Population within 1500ft: | 9067 |
| Domestic Wells within 1500ft: | 0 |
| Land Use: | Developed, High Intensity |
| Within SPA: | No |
| SPA PWS Facility ID: | Not reported |
| SPA Water Type: | Not reported |
| SPA Facility Type: | Not reported |
| SPA HUC12: | Not reported |
| Within WHPA: | No |
| WHPA PWS Facility ID: | Not reported |
| WHPA Water Type: | Not reported |
| WHPA Facility Type: | Not reported |

**THIRD POLICE PRECINCT (Continued)** **1029059805**

| | |
|---|---|
| WHPA HUC12: | Not reported |
| Within 100yr Floodplain: | No |
| Tribe: | Not reported |
| EPA Region: | 2 |
| NFA Letter 1: | Not reported |
| NFA Letter 2: | Not reported |
| NFA Letter 3: | Not reported |
| NFA Letter 4: | Not reported |
| Closed With Residual Contaminate: | Not reported |
| Coordinate Source: | State |
| X Coord: | -73.90172 |
| Y Coord: | 40.9173000000001 |
| Latitude: | 40.9172999999999 |
| Longitude: | -73.9017199999999 |

---

**U121** **CON EDISON** **RCRA NonGen / NLR** **1018280449**
**SE** **107 RADFORD ST** **FINDS** **NYP004753307**
**1/8-1/4** **YONKERS, NY 10705** **ECHO**
**0.167 mi.**
**882 ft.** **Site 1 of 7 in cluster U**

**Relative:** **Higher**

**Actual:** **79 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20150318 |
| Handler Name: | Con Edison |
| Handler Address: | Radford St |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYP004753307 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |
| State District: | NYSDEC R2 |
| Mailing Address: | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Owner Name: | Not reported |
| Owner Type: | Not reported |
| Operator Name: | Not reported |
| Operator Type: | Not reported |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |

**CON EDISON (Continued)** **1018280449**

| | |
|---|---|
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160502 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20150318 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20150318 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |

**CON EDISON (Continued)** **1018280449**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110067706593

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1018280449
Registry ID: 110067706593

DFR URL:
Name: CON EDISON
Address: 107 Radford St
City,State,Zip: YONKERS, NY 10705

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**U122** **CON EDISON** **NY MANIFEST** **S117742063**
**SE** **107 RADFORD ST** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.167 mi.**
**882 ft.** **Site 2 of 7 in cluster U**

**Relative:**
**Higher**

**Actual:**
**79 ft.**

NY MANIFEST:
EPA ID: NYP004753307
Country: USA
Name: Con Edison
Address: 107 RADFORD ST
Address 2: Not reported
City,State,Zip: YONKERS, NY 10705
Zip 4: Not reported
Location Address 1: OPP 107 RADFORD ST
Location Address 2: SB1222
Location City,State,Zip: YONKERS, NY 10701
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Con Edison

**CON EDISON (Continued)** **S117742063**

Mailing Address 1: 4 IRVING PL
Mailing Address 2: 15TH FL
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: Not reported

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 03/18/2015
Trans1 Recv Date: 03/18/2015
Trans2 Recv Date: Not reported
TSD Site Recv Date: 03/24/2015
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004753307
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 014091136JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 25
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

**U123** **CON EDISON** **NJ MANIFEST** **S120669191**
**SE** **107 RADFORD ST** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.167 mi.**
**882 ft.** **Site 3 of 7 in cluster U**

**Relative:**
**Higher**

**Actual:**
**79 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004753307 |
| Name: | CON EDISON |
| Address: | 107 RADFORD ST |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004753307 |
| Manifest Number: | 014091136JJK |
| Date Shipped: | 3/18/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |

**CON EDISON (Continued)** **S120669191**

| | |
|---|---|
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

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**V124** **EUGENIO MARIA DE HOSTOS MICROSOCIETY SCHOOL** **NY UST** **U004440107**
**North** **75 MORRIS STREET** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.168 mi.**
**885 ft.** **Site 1 of 2 in cluster V**

**Relative:** **Higher**
**Actual:** **54 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | EUGENIO MARIA DE HOSTOS MICROSOCIETY SCHOOL |
| Address: | 75 MORRIS STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-600422 / Active |
| Operator Name: | Yonkers Public Schools |
| Owner Name: | Yonkers Public Schools |
| Owner Street: | One Larkin Center |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10701 |
| GDS Number: | Not reported |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Capacity: | 10000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 1. Electronic Interstitial Monitoring |
| Date Installation: | 01/01/1992 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 2. Original sacrificial anode |
| Tank Secondary Containment: | 4. Double-Walled (underground only) |
| Piping Location: | 2. Underground/on Ground |
| Piping Type: | 2. Galvanized Steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 2. High Level Alarm |
| Piping Secondary Containment: | 0. None |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 2. Suction |

**V125** **YONKERS PUBLICS SCHOOL - DE HOSTOS SCH** **NY Spills** **1001233170**
**North** **75 MORRIS ST** **RCRA NonGen / NLR** **NYR000062919**
**1/8-1/4** **YONKERS, NY 10701** **FINDS**
**0.168 mi.** **ECHO**
**885 ft.** **Site 2 of 2 in cluster V** **NY MANIFEST**

**Relative:**
**Higher**

**Actual:**
**54 ft.**

SPILLS:

| | |
|---|---|
| Name: | YONKERS PUBLIC SCHOOLS |
| Address: | 75 MORRIS ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9111697 / 1997-10-21 |
| Facility ID: | 9111697 |
| Facility Type: | ER |
| DER Facility ID: | 212393 |
| Site ID: | 259718 |
| DEC Region: | 3 |
| Spill Cause: | Human Error |
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 1992-02-13 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1992-02-13 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Tank Truck |
| Spill Notifier: | Affected Persons |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1992-02-20 |
| Spill Record Last Update: | 1999-02-25 |
| Spiller Name: | Not reported |
| Spiller Company: | CRYSTAL TRANS. |
| Spiller Address: | 2010 WHITE PLAINS ROAD |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | 40.9220712 |
| Longitude: | -73.8997313 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY 10/21/97 FUEL RECOVERY IMPOSSIBLE; |
| Remarks: | DRIVER FILLED CLEAN OUT FOR FOOTING DRAIN INSTEAD OF FILL PIPE NO OIL IN STORM SEWER AS OF NOW TODD GHIOSAY TO CHECK OUT WCHD NOTIFIED |

All Materials:

| | |
|---|---|
| Site ID: | 259718 |
| Operable Unit ID: | 961986 |
| Operable Unit: | 01 |
| Material ID: | 416715 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | L |
| Recovered: | .00 |

**YONKERS PUBLICS SCHOOL - DE HOSTOS SCH (Continued)** **1001233170**

Oxygenate: Not reported

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20070101 |
| Handler Name: | | Yonkers Publics School - De Hostos Sch |
| Handler Address: | | Morris St |
| Handler City,State,Zip: | | YONKERS, NY 10701 |
| EPA ID: | | NYR000062919 |
| Contact Name: | | WILLIAM SLADE |
| Contact Address: | | MORRIS ST |
| Contact City,State,Zip: | | YONKERS, NY 10701 |
| Contact Telephone: | | 914-681-6405 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Municipal |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R3 |
| Mailing Address: | | MORRIS ST |
| Mailing City,State,Zip: | | YONKERS, NY 10701 |
| Owner Name: | Yonkers Public Schools | |
| Owner Type: | | Municipal |
| Operator Name: | Yonkers Public Schools | |
| Operator Type: | | Municipal |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |

**YONKERS PUBLICS SCHOOL - DE HOSTOS SCH (Continued)** **1001233170**

| | |
|---|---|
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150414 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Hazardous Waste Summary:

| | |
|---|---|
| Waste Code: | D000 |
| Waste Description: | Not Defined |
| Waste Code: | D008 |
| Waste Description: | Lead |
| Waste Code: | D009 |
| Waste Description: | Mercury |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: YONKERS PUBLIC SCHOOLS | |
| Legal Status: | Municipal |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 145 PALMER RD |
| Owner/Operator City,State,Zip: | YONKERS, NY 10701 |
| Owner/Operator Telephone: | 914-376-8010 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: YONKERS PUBLIC SCHOOLS | |
| Legal Status: | Municipal |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 145 PALMER RD |
| Owner/Operator City,State,Zip: | YONKERS, NY 10701 |
| Owner/Operator Telephone: | 914-376-8010 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: YONKERS PUBLIC SCHOOLS | |
| Legal Status: | Municipal |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |

**YONKERS PUBLICS SCHOOL - DE HOSTOS SCH (Continued)** **1001233170**

Owner/Operator Address: 145 PALMER RD
Owner/Operator City,State,Zip: YONKERS, NY 10701
Owner/Operator Telephone: 914-376-8010
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:

Receive Date: 20060101
Handler Name: YONKERS PUBLICS SCHOOL - DE HOSTOS SCH
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20070101
Handler Name: YONKERS PUBLICS SCHOOL - DE HOSTOS SCH
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19981102
Handler Name: YONKERS PUBLICS SCHOOL - DE HOSTOS SCH
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

**YONKERS PUBLICS SCHOOL - DE HOSTOS SCH (Continued)** **1001233170**

FINDS:
Registry ID: 110004548357

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1001233170
Registry ID: 110004548357

DFR URL:
Name: YONKERS PUBLICS SCHOOL - DE HOSTOS SCH
Address: 75 Morris St
City,State,Zip: YONKERS, NY 10701

NY MANIFEST:
EPA ID: NYR000062919
Country: USA
Name: De Hostas School
Address: 75 MORRIS ST
Address 2: Not reported
City,State,Zip: YONKERS, NY 10701
Zip 4: Not reported
Location Address 1: 75 MORRIS ST
Location Address 2: Not reported
Location City,State,Zip: YONKERS, NY 10701
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: De Hostas School
Mailing Contact: N/S
Mailing Address 1: 75 MORRIS ST
Mailing Address 2: Not reported
Mailing City,State,Zip: YONKERS, NY 10701
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 9143768998

Manifest Data:
Document ID: NYG0688401
Manifest Status: Not reported
Trans1 State ID: AZ002
Year: 1999
Trans2 State ID: Not reported

**YONKERS PUBLICS SCHOOL - DE HOSTOS SCH (Continued)** **1001233170**

| | |
|---|---|
| Generator Ship Date: | 02/10/1999 |
| Trans1 Recv Date: | 02/10/1999 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 02/18/1999 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYR000062919 |
| Trans1 EPA ID: | AZD983473539 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | AZ0000337360 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Mercury |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00900 |
| Units: | Pounds |
| Number of Containers: | 009 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

---

**W126** **NINO CAROZZA** **NY LTANKS** **S117853813**
**ENE** **67-69 ELLIOT AVE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.170 mi.**
**897 ft.** **Site 1 of 6 in cluster W**

**Relative:** **Higher**
**Actual:** **74 ft.**

LTANKS:

| | |
|---|---|
| Name: | NINO CAROZZA |
| Address: | 67-69 ELLIOT AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1500515 / 2016-05-10 |
| Facility ID: | 1500515 |
| Site ID: | 506673 |
| Spill Date: | 2015-04-15 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |

**NINO CAROZZA (Continued)** **S117853813**

| | |
|---|---|
| Reported to Dept: | 2015-04-15 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2015-04-15 |
| Spill Record Last Update: | 2016-05-10 |
| Spiller Name: | NINO CAROZZA |
| Spiller Company: | NINO CAROZZA |
| Spiller Address: | 67-69 ELLIOT AVE |
| Spiller County: | 999 |
| Spiller Contact: | NINO CAROZZA |
| Spiller Phone: | (914) 774-8239 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 461443 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 4-15-15 Spoke to Kathy. Tank is 1500 gallon UST. Failed with loud hissing. She says that tank was just registered. Sent email to Chris Lalak, WCHD, to confirm. jc 4-23-15 Email response from Chris dates 4-21-15. He confirms registration of a 1500 gal tank installed in 1986. PBS 3-802006. Wayne Schneider to follow-up. jc 04/29/16 Northeast Environmental reported that they excavated and removed the 2000 g tank along with 25.81 tons of contaminated soil. Post excavation soil sample results were below DEC guidance values. NFA. TG |
| | Not reported |
| Remarks: | retest planned |

All Materials:

| | |
|---|---|
| Site ID: | 506673 |
| Operable Unit ID: | 1256016 |
| Operable Unit: | 01 |
| Material ID: | 2258810 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**W127** **HLJ OF N.Y. INC.** **NY UST** **U004440443**
**ENE** **67-69 ELLIOTT AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.170 mi.**
**897 ft.** **Site 2 of 6 in cluster W**

**Relative:** WESTCHESTER CO. UST:
**Higher**

| | |
|---|---|
| Name: | HLJ OF N.Y. INC. |
| Address: | 67-69 ELLIOTT AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |

**Actual:**
**74 ft.**

**HLJ OF N.Y. INC. (Continued)** **U004440443**

| | |
|---|---|
| Id/Status: | 3-802006 / Unregulated |
| Operator Name: | Gaetano Carrozza |
| Owner Name: | HLJ OF N.Y. INC. |
| Owner Street: | PO BOX 755 |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10703 |
| GDS Number: | Not reported |
| | |
| Tank Number: | 1 |
| Status: | 3. Closed - Removed |
| Capacity: | 1500 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 12/01/1986 |
| Date Perm Closure: | 11/17/2015 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on Ground |
| Piping Type: | 10. Copper |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 5. Vent Whistle |
| Piping Secondary Containment: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**P128** **CONSOLIDATED EDISON COMPANY OF NY C/O ACV ENVIRO** **E MANIFEST** **1031971649**
**ESE** **146 ELLIOT AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.170 mi.**
**899 ft.** **Site 5 of 5 in cluster P**

**Relative:**
**Higher**

**Actual:**
**85 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 024111516JJK |
| Last Updated Date: | 20221010 |
| Shipped Date: | 20220929 |
| Received Date: | 20220930 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Consolidated Edison Company Of Ny C/O Acv Enviro |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 146 ELLIOT AVE |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 928 E HAZELWOOD AVE |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | RAHWAY |
| Generator Mail Zip: | 07065 |

**CONSOLIDATED EDISON COMPANY OF NY C/O ACV ENVIRO (Continued)** **1031971649**

| | |
|---|---|
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | KEARNY |
| Designated Facility Location Zip: | 07032 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

Transporter:

| | |
|---|---|
| Manifest Tracking Number: | 024111516JJK |
| Transporter Line Number: | 1 |
| Transporter EPA ID: | NJD003812047 |
| Transporter Name: | Acv Environmental Services Inc. |

Waste Line:

| | |
|---|---|
| Manifest Tracking Number: | 024111516JJK |
| Waste Line Number: | 1 |
| U.S. DOT Hazardous Indicator: | Y |
| U.S. DOT ID Number: | NA3082 |
| U.S. DOT Description: | Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq |
| Non-Hazardous Waste Description: | Not reported |
| Number of Containers: | 1 |
| Container Type Code: | TT |
| Container Type Description: | Cargo tanks (tank trucks) |
| Waste Quantity: | 300 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.15 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.15 |
| Waste Quantity, in Kilograms: | 136.0545 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 136.0545 |
| Management Method Code: | H110 |
| Management Method Description: | STABILIZATION |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |

**CONSOLIDATED EDISON COMPANY OF NY C/O ACV ENVIRO (Continued)** **1031971649**

| | |
|---|---|
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | D008 |
| Quantity Haz Kg: | 136.0545 |
| Quantity Haz Tons: | 0.15 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-T |

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**O129** **CON EDISON SERVICE BOX: 1250** **RCRA NonGen / NLR** **1017773099**
**ENE** **88 ELLIOTT AVE** **FINDS** **NYP004508776**
**1/8-1/4** **YONKERS, NY 10703**
**0.174 mi.**
**919 ft.** **Site 7 of 8 in cluster O**

**Relative:** **Higher**

**Actual:** **76 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20140523 |
| Handler Name: | Con Edison Service Box: 1250 |
| Handler Address: | Elliott Ave |
| Handler City,State,Zip: | YONKERS, NY 10703 |
| EPA ID: | NYP004508776 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | SENIOR SCIENTIST |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |
| State District: | NYSDEC R2 |
| Mailing Address: | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Owner Name: Not reported | |
| Owner Type: | Not reported |
| Operator Name: Not reported | |
| Operator Type: | Not reported |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |

**CON EDISON SERVICE BOX: 1250 (Continued)** **1017773099**

| | |
|---|---|
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150211 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20140423 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Large Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140423 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

**CON EDISON SERVICE BOX: 1250 (Continued)** **1017773099**

| | |
|---|---|
| Receive Date: | 20140523 |
| Handler Name: | CON EDISON SERVICE BOX: 1250 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110063761157

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

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**O130** **CON EDISON** **NY MANIFEST** **S117058743**
**ENE** **88 ELLIOTT AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10703**
**0.174 mi.**
**919 ft.** **Site 8 of 8 in cluster O**

**Relative:**
**Higher**

**Actual:**
**76 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004508776 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 88 ELLIOTT AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10703 |
| Zip 4: | Not reported |
| Location Address 1: | 88 ELLIOTT AVE |
| Location Address 2: | SB 1250 |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Tom Teeling |

**CON EDISON (Continued)** **S117058743**

Mailing Address 1: 4 IRVING PLACE - 15TH FLOOR
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: Not reported

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 04/23/2014
Trans1 Recv Date: 04/23/2014
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/29/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004508776
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 012770985JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 25
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

**Q131**
**South**
**1/8-1/4**
**0.176 mi.**
**927 ft.**

**STANGER HOME**
**30 GRAY PLACE**
**YONKERS, NY**

**Site 3 of 4 in cluster Q**

**NY LTANKS** **S108131355**
**N/A**

**Relative:**
**Higher**

**Actual:**
**99 ft.**

LTANKS:

| | |
|---|---|
| Name: | STANGER HOME |
| Address: | 30 GRAY PLACE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0606263 / 2006-12-27 |
| Facility ID: | 0606263 |
| Site ID: | 369580 |
| Spill Date: | 2006-08-31 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODee |
| Referred To: | WCDOH |
| Reported to Dept: | 2006-08-31 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2006-08-31 |
| Spill Record Last Update: | 2006-12-27 |
| Spiller Name: | KEVIN STANGER |
| Spiller Company: | STANGER HOME |
| Spiller Address: | 30 GRAY PLACE |
| Spiller County: | 001 |
| Spiller Contact: | KEVIN STANGER |
| Spiller Phone: | (914) 879-1426 |
| Spiller Extention: | 2 |
| DEC Region: | 3 |
| DER Facility ID: | 319452 |
| Latitude: | 40.9169335 |
| Longitude: | -73.9005211 |
| DEC Memo: | 0606263 - 30 Grey pl, yonkers, petrometer removed, retested and passed, 9-25-06, NFA |
| Remarks: | PBS No: 3-800983 -PBS No. not found in UIS, may be invalid. |

All TTF:

| | |
|---|---|
| Facility ID: | 0606263 |
| Spill Number: | 0606263 |
| Spill Tank Test: | 1550242 |
| Site ID: | 369580 |
| Tank Number: | 1 |
| Tank Size: | 1500 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |

**STANGER HOME (Continued)** **S108131355**

| | |
|---|---|
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 369580 |
| Operable Unit ID: | 1127414 |
| Operable Unit: | 01 |
| Material ID: | 2117011 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**Q132** **MIKEVIN MANAGEMENT III LLC** **NY UST** **U004440966**
**South** **30 GRAY PLACE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.176 mi.**
**927 ft.** **Site 4 of 4 in cluster Q**

**Relative:**
**Higher**

**Actual:**
**99 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | MIKEVIN MANAGEMENT III LLC |
| Address: | 30 GRAY PLACE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-800983 / Unregulated: <1101 gal. PBS |
| Operator Name: | Kevin Stenger |
| Owner Name: | Mikevin Management III LLC |
| Owner Street: | 30 Gray Place |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10705 |
| GDS Number: | Not reported |
| Tank Number: | 1 |
| Status: | 3. Closed - Removed |
| Capacity: | 1500 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/01/1957 |
| Date Perm Closure: | 11/15/2007 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 3. Aboveground/underground combination |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |

**MIKEVIN MANAGEMENT III LLC (Continued)** **U004440966**

Overfill Prevention: 1. Float Vent Valve
Piping Secondary Containment: Not reported
Spill Prevention: Not reported
Dispenser: 3. Gravity

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**U133** **CON EDISON** **NY MANIFEST** **S117738954**
**SE** **160 ELLIOTT ST** **N/A**
**1/8-1/4** **YONKERS, NY 10801**
**0.178 mi.**
**942 ft.** **Site 4 of 7 in cluster U**

**Relative:**
**Higher**

**Actual:**
**83 ft.**

NY MANIFEST:
EPA ID: NYP004720363
Country: USA
Name: Con Edison
Address: 160 ELLIOTT ST
Address 2: SB1244
City,State,Zip: YONKERS, NY 10801
Zip 4: Not reported
Location Address 1: 160 ELLIOTT ST
Location Address 2: SB1244
Location City,State,Zip: YONKERS, NY 10801
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Con Edison
Mailing Address 1: 4 IRVING PL
Mailing Address 2: 15TH FL
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: Not reported

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 01/29/2015
Trans1 Recv Date: 01/29/2015
Trans2 Recv Date: Not reported
TSD Site Recv Date: 02/04/2015
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004720363
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 014161944JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N

**CON EDISON (Continued)** **S117738954**

| | |
|---|---|
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 50 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

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**S134** **CON EDISON/ATTN: ELECTRIC ENVIRONMENTAL OPS** **E MANIFEST** **1031961594**
**East** **SOUTH BROADWAY AND 6 POST ST** **N/A**
**1/8-1/4** **BRONX, NY 10705**
**0.178 mi.**
**942 ft.** **Site 4 of 14 in cluster S**

**Relative:** **Higher**

**Actual:** **79 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 006112951GBF |
| Last Updated Date: | 20210921 |
| Shipped Date: | 20210913 |
| Received Date: | 20210913 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Con Edison/Attn: Electric Environmental Ops |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | SOUTH BROADWAY AND 6 POST ST |
| Generator Location Street 2: | Not reported |
| Generator Location City: | BRONX |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 1601 BRONXDALE AVENUE |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | BRONX |
| Generator Mail Zip: | 10462 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |

**CON EDISON/ATTN: ELECTRIC ENVIRONMENTAL OPS (Continued)** **1031961594**

| | |
|---|---|
| Designated Facility Name: | Not reported |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | KEARNY |
| Designated Facility Location Zip: | 07032 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Clean Earth Of North Jersey |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

Transporter:

| | |
|---|---|
| Manifest Tracking Number: | 006112951GBF |
| Transporter Line Number: | 1 |
| Transporter EPA ID: | NJD003812047 |
| Transporter Name: | Acv Environmental Services Inc. |

Waste Line:

| | |
|---|---|
| Manifest Tracking Number: | 006112951GBF |
| Waste Line Number: | 1 |
| U.S. DOT Hazardous Indicator: | Y |
| U.S. DOT ID Number: | NA3082 |
| U.S. DOT Description: | Rq, Na3082, Hazardous Waste, Liquid N.O.S.(Lead), 9, Pg Iii, (D008) |
| Non-Hazardous Waste Description: | Not reported |
| Number of Containers: | 1 |
| Container Type Code: | TT |
| Container Type Description: | Cargo tanks (tank trucks) |
| Waste Quantity: | 300 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.15 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.15 |
| Waste Quantity, in Kilograms: | 136.0545 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 136.0545 |
| Management Method Code: | H110 |
| Management Method Description: | STABILIZATION |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |

**CON EDISON/ATTN: ELECTRIC ENVIRONMENTAL OPS (Continued)** **1031961594**

| | |
|---|---|
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | D008 |
| Quantity Haz Kg: | 136.0545 |
| Quantity Haz Tons: | 0.15 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-T |

---

**R135** **CON ED** **NY MANIFEST** **S118259013**
**ENE** **61 ELLIOT AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.181 mi.**
**954 ft.** **Site 3 of 12 in cluster R**

**Relative:**
**Higher**

**Actual:**
**74 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004824849 |
| Country: | USA |
| Name: | Con Ed |
| Address: | 61 ELLIOT AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | 61 ELLIOTT AV |
| Location Address 2: | SB 1247 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Ed |
| Mailing Contact: | Tom Teeling |
| Mailing Address 1: | 4 IRVING PLACE - 15TH FLOOR |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 08/17/2015 |
| Trans1 Recv Date: | 08/17/2015 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 08/21/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004824849 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |

**CON ED (Continued)** **S118259013**

| | |
|---|---|
| Manifest Tracking Number: | 014472184JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 75 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**R136** **CON EDISON** **NJ MANIFEST** **S120675453**
**ENE** **61 ELLIOT AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.181 mi.**
**954 ft.** **Site 4 of 12 in cluster R**

**Relative:** **Higher**
**Actual:** **74 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004824849 |
| Name: | CON EDISON |
| Address: | 61 ELLIOT AVE |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |

**CON EDISON (Continued)** **S120675453**

Date Change: Not reported

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004824849 |
| Manifest Number: | 014472184JJK |
| Date Shipped: | 8/17/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

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**R137** **CON EDISON** **RCRA NonGen / NLR** **1019906656**
**ENE** **61 ELLIOT AVE** **NYP004824849**
**1/8-1/4** **YONKERS, NY 10705**
**0.181 mi.**
**954 ft.** **Site 5 of 12 in cluster R**

**Relative:**
**Higher**

**Actual:**
**74 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20150817 |
| Handler Name: | Con Edison |
| Handler Address: | Elliot Ave |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYP004824849 |
| Contact Name: | THOMAS TEELING |

**CON EDISON (Continued)** **1019906656**

| | | |
|---|---|---|
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20160909 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |

**CON EDISON (Continued)** **1019906656**

Exporter of Spent Lead Acid Batteries: No
Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Historic Generators:
Receive Date: 20150817
Handler Name: CON EDISON
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20150817
Handler Name: CON EDISON
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

---

**S138** **CON EDISON SERVICE BOX: 490** **RCRA NonGen / NLR** **1016968211**
**ESE** **415 S BROADWAY** **NY MANIFEST** **NYP004418216**
**1/8-1/4** **YONKERS, NY 10710**
**0.182 mi.**
**963 ft.** **Site 5 of 14 in cluster S**

**Relative:** **Higher**
**Actual:** **83 ft.**

RCRA Listings:
Date Form Received by Agency: 20140214
Handler Name: Con Edison Service Box: 490
Handler Address: S Broadway
Handler City,State,Zip: YONKERS, NY 10710
EPA ID: NYP004418216
Contact Name: THOMAS TEELING

**CON EDISON SERVICE BOX: 490 (Continued)** **1016968211**

| | | |
|---|---|---|
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20141014 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |

**CON EDISON SERVICE BOX: 490 (Continued)** **1016968211**

| | |
|---|---|
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20140114 |
| Handler Name: CON EDISON SERVICE BOX: | 490 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140214 |
| Handler Name: CON EDISON SERVICE BOX: | 490 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004418216 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 415 S BROADWAY |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10710 |
| Zip 4: | Not reported |
| Location Address 1: | 415 S BROADWAY |
| Location Address 2: | SB 490 |
| Location City,State,Zip: | YONKERS, NY 10705 |

**CON EDISON SERVICE BOX: 490 (Continued)** **1016968211**

Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Tom Teeling
Mailing Address 1: 4 IRVING PLACE - 15TH FLOOR
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 01/14/2014
Trans1 Recv Date: 01/14/2014
Trans2 Recv Date: Not reported
TSD Site Recv Date: 01/15/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004418216
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 011696145JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 50

**CON EDISON SERVICE BOX: 490 (Continued)** **1016968211**

| | |
|---|---|
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**139**
**NNW**
**1/8-1/4**
**0.183 mi.**
**968 ft.**

**SPILL NUMBER 9512116**
**8 PURSER PL**
**YONKERS, NY**

**NY LTANKS** **S104619268**
**N/A**

**Relative:**
**Lower**

**Actual:**
**44 ft.**

LTANKS:

| | |
|---|---|
| Name: | SPILL NUMBER 9512116 |
| Address: | 8 PURSER PL |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9512116 / 1996-01-02 |
| Facility ID: | 9512116 |
| Site ID: | 73150 |
| Spill Date: | 1995-12-27 |
| Spill Cause: | Tank Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1995-12-27 |
| CID: | 211 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1995-12-27 |
| Spill Record Last Update: | 1996-02-06 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | ROBATTI,MR |
| Spiller Phone: | (914) 965-5137 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 68913 |
| Latitude: | 40.9227298 |
| Longitude: | -73.9017275 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY 12/27/95 PLANS TO START CLEAN UP TODAY (12/27) 01/02/96 CONTAMINATION FOUND DURING TANK REMOVAL EIGHT - TEN DRUMS OF SOIL REMOVED EXCESSIVE CORROSION & SCALING ON TANK FEILD SCREENING AND SAMPLING CONFIRMED REMOVAL OF ALL CONTAMINATION ACCORDING TO CONSULTANT |
| Remarks: | CALLER REMOVED TANK ON PROPERTY AND FOUND GROUND CONTAMINATION |

**SPILL NUMBER 9512116 (Continued)** **S104619268**

All Materials:

| | |
|---|---|
| Site ID: | 73150 |
| Operable Unit ID: | 1023059 |
| Operable Unit: | 01 |
| Material ID: | 359433 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**140**
**ESE**
**1/8-1/4**
**0.183 mi.**
**968 ft.**

**CONSOLIDATED EDISON ELECTRIC**
**435 S BROADWAY**
**YONKERS, NY 10705**

**E MANIFEST** **1031976759**
**N/A**

**Relative:**
**Higher**

**Actual:**
**83 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 016272827FLE |
| Last Updated Date: | 20211230 |
| Shipped Date: | 20211215 |
| Received Date: | 20211220 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Consolidated Edison Electric |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 435 S BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 116 SKYLINE DRIVE |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | SOUTH PLAINFIELD |
| Generator Mail Zip: | 07080 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | KEARNY |
| Designated Facility Location Zip: | 07032 |

**CONSOLIDATED EDISON ELECTRIC (Continued)** **1031976759**

Designated Facility Location State: NJ
Designated Facility Contact Company Name: Not reported
Manifest Residue Indicator: N
Rejection Indicator: N

Transporter:
Manifest Tracking Number: 016272827FLE
Transporter Line Number: 1
Transporter EPA ID: MAD039322250
Transporter Name: Clean Harbors Environmental Services Inc

Waste Line:
Manifest Tracking Number: 016272827FLE
Waste Line Number: 1
U.S. DOT Hazardous Indicator: Y
U.S. DOT ID Number: NA3082
U.S. DOT Description: Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq
Non-Hazardous Waste Description: Not reported
Number of Containers: 1
Container Type Code: TT
Container Type Description: Cargo tanks (tank trucks)
Waste Quantity: 200
Quantity Unit of Measure Code: P
Quantity Unit of Measure Description: Pounds
Waste Quantity, in Tons: 0.1
Acute Waste Quantity, in Tons: 0
Non-Acute Waste Quantity, in Tons: 0.1
Waste Quantity, in Kilograms: 90.703
Acute Waste Quantity, in Kilograms: 0
Non-Acute Waste Quantity, in Kilorgrams: 90.703
Management Method Code: H110
Management Method Description: STABILIZATION
Waste Residue Indicator: N
Quantity Discrepancy Indicator: N
Waste Type Discrepancy Indicator: N
Waste Density: Not reported
Waste Density Unit of Measure Code: Not reported
Waste Density Unit of Measure Description: Not reported
Form Code: Not reported
Form Code Description: Not reported
Source Code: Not reported
Source Code Description: Not reported
Waste Minimization Code: Not reported
Waste Minimization Code Description: Not reported
Consent Number: Not reported
EPA Waste Indicator: Y
Federal Waste Codes: D008
Quantity Haz Kg: 90.703
Quantity Haz Tons: 0.1
Quantity Non Haz Kg: 0
Quantity Non Haz Tons: 0
State Waste Codes: NY-T

**R141** **CONSOLIDATED EDISON** **NY MANIFEST** **S111157713**
**NE** **HAMILTON & MORRIS ST** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.185 mi.**
**975 ft.** **Site 6 of 12 in cluster R**

**Relative:**
**Higher**

**Actual:**
**69 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004230785 |
| Country: | USA |
| Name: | Consolidated Edison |
| Address: | HAMILTON & MORRIS ST |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10701 |
| Zip 4: | Not reported |
| Location Address 1: | HAMILTON & MORRIS ST |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Consolidated Edison |
| Mailing Contact: | Tom Teeling |
| Mailing Address 1: | 4 IRVING PLACE RM 828 |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 03/14/2011 |
| Trans1 Recv Date: | 03/14/2011 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 03/16/2011 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004230785 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 007655966JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | Y |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CONSOLIDATED EDISON (Continued)** **S111157713**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 100 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**R142** **CON EDISON MANHOLE 1084** **RCRA NonGen / NLR** **1014918482**
**NE** **HAMILTON AVE & MORRIS AVE** **NY MANIFEST** **NYP004220984**
**1/8-1/4** **YONKERS, NY 10705** **NJ MANIFEST**
**0.185 mi.**
**975 ft.** **Site 7 of 12 in cluster R**

**Relative:** **Higher**
**Actual:** **69 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20101231 |
| Handler Name: | Con Edison Manhole 1084 |
| Handler Address: | Hamilton Ave & Morris Ave |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYP004220984 |
| Contact Name: | GINO FRABASILE |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 914-925-6219 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | SR SPECIALIST |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |
| State District: | NYSDEC R2 |
| Mailing Address: | IRVING PL RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Owner Name: | Not reported |
| Owner Type: | Not reported |
| Operator Name: | Not reported |
| Operator Type: | Not reported |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |

**CON EDISON MANHOLE 1084 (Continued)** **1014918482**

| | |
|---|---|
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20110701 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20101201 |
| Handler Name: CON EDISON MANHOLE 1084 | |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20101231 |
| Handler Name: CON EDISON MANHOLE 1084 | |

**CON EDISON MANHOLE 1084 (Continued)** **1014918482**

| | |
|---|---|
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004220984 |
| Country: | USA |
| Name: | Consolidated Edison |
| Address: | HAMILTON AVE & MORRIS AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | MH1084 - HAMILTON AVE & 40 MORRIS |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Consolidated Edison |
| Mailing Contact: | Thomas Teeling |
| Mailing Address 1: | 4 IRVING PL RM 828 |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 12/01/2010 |
| Trans1 Recv Date: | 12/01/2010 |

**CON EDISON MANHOLE 1084 (Continued)** **1014918482**

| | |
|---|---|
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 12/07/2010 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004220984 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 006874998JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 100 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004220984 |
| Name: | CON EDISON MANHOLE 1084 |
| Address: | HAMILTON AVE & MORRIS AVE |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | GINO FRABASILE |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |

**CON EDISON MANHOLE 1084 (Continued)** **1014918482**

| | |
|---|---|
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004220984 |
| Manifest Number: | 006874998JJK |
| Date Shipped: | 12/01/2010 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 12/01/2010 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 12/07/2010 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 100 |
| Unit: | P |

**R143**
**NE**
**1/8-1/4**
**0.185 mi.**
**975 ft.**

**CON EDISON**
**MORRIS AVE & HAMILTON AVE**
**YONKERS, NY 10705**

**Site 8 of 12 in cluster R**

**NJ MANIFEST** | **S120674822** | **N/A**

**Relative:**
**Higher**

**Actual:**
**69 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004816896 |
| Name: | CON EDISON |
| Address: | MORRIS AVE & HAMILTON AVE |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004816896 |
| Manifest Number: | 014473051JJK |
| Date Shipped: | 8/2/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |

**CON EDISON (Continued)** **S120674822**

| | |
|---|---|
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

---

**R144** **CON EDISON** **RCRA NonGen / NLR** **1019906069**
**NE** **MORRIS AVE & HAMILTON AVE** **FINDS** **NYP004816896**
**1/8-1/4** **YONKERS, NY 10705** **ECHO**
**0.185 mi.**
**975 ft.** **Site 9 of 12 in cluster R**

**Relative:** **Higher**
**Actual:** **69 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20150802 |
| Handler Name: | | Con Edison |
| Handler Address: | | Morris Ave & Hamilton Ave |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYP004816896 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |

**CON EDISON (Continued)** **1019906069**

| | |
|---|---|
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160909 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20150802 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20150802 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

**CON EDISON (Continued)** **1019906069**

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110069703397

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1019906069
Registry ID: 110069703397

DFR URL:
Name: CON EDISON
Address: Morris Ave & Hamilton Ave
City,State,Zip: YONKERS, NY 10705

---

**R145**
**NE**
**1/8-1/4**
**0.185 mi.**
**975 ft.**

**CON EDISON MANHOLE 1084**
**MORRIS ST & HAMITON AVE SW COR**
**YONKERS, NY 10705**

**RCRA NonGen / NLR** **1014918317**
**NY MANIFEST** **NYP004219315**
**NJ MANIFEST**

**Site 10 of 12 in cluster R**

**Relative:**
**Higher**

**Actual:**
**69 ft.**

RCRA Listings:
Date Form Received by Agency: 20101201
Handler Name: Con Edison Manhole 1084
Handler Address: Morris St & Hamiton Ave Sw Cor
Handler City,State,Zip: YONKERS, NY 10705
EPA ID: NYP004219315
Contact Name: DONALD SENNO
Contact Address: Not reported
Contact City,State,Zip: Not reported
Contact Telephone: 914-925-6219
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: SR SPECIALIST
EPA Region: 02
Land Type: Private
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Not reported
State District Owner: Ny
State District: NYSDEC R2

**CON EDISON MANHOLE 1084 (Continued)** **1014918317**

| | | |
|---|---|---|
| Mailing Address: | | IRVING PL RM 828 |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20110701 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20101101 |
| Handler Name: | CON EDISON MANHOLE 1084 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |

**CON EDISON MANHOLE 1084 (Continued)** **1014918317**

Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20101201
Handler Name: CON EDISON MANHOLE 1084
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:
EPA ID: NYP004219315
Country: USA
Name: Consolidated Edison - Mh 1084
Address: MORRIS ST & HAMITON AVE SW COR
Address 2: Not reported
City,State,Zip: YONKERS, NY 10705
Zip 4: Not reported
Location Address 1: S/W/C MORRIS ST & HAMILTON AVE
Location Address 2: Not reported
Location City,State,Zip: YONKERS, NY 10701
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Consolidated Edison - Mh 1084
Mailing Contact: Tom Teeling
Mailing Address 1: 4 IRVING PLACE RM 828
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

**CON EDISON MANHOLE 1084 (Continued)** **1014918317**

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 11/01/2010 |
| Trans1 Recv Date: | 11/01/2010 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 11/05/2010 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004219315 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 006874898JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | Y |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 55 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004219315 |
| Name: | CON EDISON MANHOLE 1084 |
| Address: | MORRIS ST & HAMITON AVE SW COR |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL RM 828 |

**CON EDISON MANHOLE 1084 (Continued)** **1014918317**

| | |
|---|---|
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | DONALD SENNO |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004219315 |
| Manifest Number: | 006874898JJK |
| Date Shipped: | 11/01/2010 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 11/01/2010 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 11/05/2010 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

**CON EDISON MANHOLE 1084 (Continued)** **1014918317**

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 55 |
| Unit: | P |

---

**U146** **CON EDISON** **NJ MANIFEST** **S120674197**
**SE** **100 RADFORD ST** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.185 mi.**
**978 ft.** **Site 5 of 7 in cluster U**

**Relative:** **Higher**
**Actual:** **79 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004810137 |
| Name: | CON EDISON |
| Address: | 100 RADFORD ST |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004810137 |
| Manifest Number: | 014472075JJK |
| Date Shipped: | 7/21/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |

**CON EDISON (Continued)** **S120674197**

| | |
|---|---|
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

---

**U147** **CON EDISON** **RCRA NonGen / NLR** **1019905478**
**SE** **100 RADFORD ST** **NYP004810137**
**1/8-1/4** **YONKERS, NY 10705**
**0.185 mi.**
**978 ft.** **Site 6 of 7 in cluster U**

**Relative:** **Higher**

**Actual:** **79 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20150721 |
| Handler Name: | Con Edison |
| Handler Address: | Radford St |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYP004810137 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |
| State District: | NYSDEC R2 |
| Mailing Address: | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Owner Name: | Not reported |
| Owner Type: | Not reported |
| Operator Name: | Not reported |
| Operator Type: | Not reported |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |

**CON EDISON (Continued)** **1019905478**

| | |
|---|---|
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160909 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20150721 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Large Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20150721 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |

**CON EDISON (Continued)** **1019905478**

| | |
|---|---|
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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**X148** **PREMIER ASSET SERVICES** **NY LTANKS** **S109583718**
**NNE** **38 LIVINGSTON AVE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.188 mi.**
**992 ft.** **Site 1 of 2 in cluster X**

**Relative:**
**Higher**

**Actual:**
**66 ft.**

LTANKS:

| | |
|---|---|
| Name: | PREMIER ASSET SERVICES |
| Address: | 38 LIVINGSTON AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0902127 / 2009-08-31 |
| Facility ID: | 0902127 |
| Site ID: | 414159 |
| Spill Date: | 2009-05-20 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2009-05-21 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Local Agency |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2009-05-21 |
| Spill Record Last Update: | 2009-08-31 |
| Spiller Name: | Not reported |
| Spiller Company: | PREMIER ASSET SERVICES |
| Spiller Address: | 38 LIVINGSTON AVE |
| Spiller County: | 999 |
| Spiller Contact: | PREMIER ASSET SERVICES |

**PREMIER ASSET SERVICES (Continued)** **S109583718**

| | |
|---|---|
| Spiller Phone: | (914) 761-7878 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 363253 |
| Latitude: | 40.9223717 |
| Longitude: | -73.8988886 |
| DEC Memo: | 5-22-09 Tank failed in wet and dry portions. Test done for prospective buyer. Onwer has been notified. jc08/06/09 Northeast Environmental reported that they excavated and removed the tank and that no contamination was noted in the tank grave. Post excavation TAGM soil sample results were below DEC guidance values. NFA TG |
| Remarks: | 1709 The caller advised dispatch the tank test failed. Clean up is unknown at this time. |

All Materials:

| | |
|---|---|
| Site ID: | 414159 |
| Operable Unit ID: | 1170552 |
| Operable Unit: | 01 |
| Material ID: | 2162287 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**U149** **95 RADFORD REALTY CORPORATION** **NY UST** **U003884622**
**SE** **95 RADFORD STREET** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.189 mi.**
**996 ft.** **Site 7 of 7 in cluster U**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | 95 RADFORD REALTY CORPORATION |
| Address: | 95 RADFORD STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-600815 / Active |
| Operator Name: | Abe Rabadi |
| Owner Name: | 95 Radford Realty Corporation |
| Owner Street: | P.O. Box 70 |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10704 |
| GDS Number: | Not reported |
| Tank Number: | 001 |
| Status: | 1. In-Service |
| Capacity: | 1500 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/01/1953 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |

**95 RADFORD REALTY CORPORATION (Continued)** **U003884622**

| | |
|---|---|
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 3. Vault (w/ no access) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 10. Copper |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 2. High Level Alarm |
| Piping Secondary Containment: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**S150** **UNKNOWN** **NY LTANKS** **S104514271**
**East** **4 POST ROAD** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.189 mi.**
**1000 ft.** **Site 6 of 14 in cluster S**

**Relative:** **Higher**

**Actual:** **78 ft.**

LTANKS:

| | |
|---|---|
| Name: | UNKNOWN |
| Address: | 4 POST ROAD |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 8602879 / 1986-08-08 |
| Facility ID: | 8602879 |
| Site ID: | 167939 |
| Spill Date: | 1986-07-31 |
| Spill Cause: | Tank Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | Not reported |
| Cleanup Ceased: | 1986-08-08 |
| SWIS: | 6018 |
| Investigator: | dxtraver |
| Referred To: | Not reported |
| Reported to Dept: | 1986-07-31 |
| CID: | Not reported |
| Water Affected: | NONE |
| Spill Notifier: | Fire Department |
| Last Inspection: | 1986-08-08 |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1986-08-21 |
| Spill Record Last Update: | 1986-10-27 |
| Spiller Name: | Not reported |
| Spiller Company: | UNKNOWN |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 141490 |
| Latitude: | 40.9199137 |
| Longitude: | -73.8964300 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was TRAVER / / : YONKERS STP DID NOT REPORT ANY OIL NOTED. |
| Remarks: | 1000 GAL. TANK LEAK TO SEWER TO YONKERS STP. |

**UNKNOWN (Continued)** **S104514271**

All Materials:

| | |
|---|---|
| Site ID: | 167939 |
| Operable Unit ID: | 899629 |
| Operable Unit: | 01 |
| Material ID: | 475736 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**X151** **45 MORRIS STREET ASSCIATES** **NY UST** **U004439229**
**NNE** **45 MORRIS STREET** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.190 mi.**
**1005 ft.** **Site 2 of 2 in cluster X**

**Relative:** **Higher**
**Actual:** **70 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | 45 MORRIS STREET ASSCIATES |
| Address: | 45 MORRIS STREET |
| City,State,Zip: | YONKERS, NY 10701 |
| Id/Status: | 3-800091 / Administratively Closed |
| Operator Name: | Not reported |
| Owner Name: | Mr Robert Guerrerio, Jr |
| Owner Street: | 140 Valley Street |
| Owner Address2: | Not reported |
| Owner City: | North Tarrytown |
| Owner State: | NY |
| Owner Zipcode: | 10591 |
| GDS Number: | Not reported |
| | |
| Tank Number: | 01 |
| Status: | 0. Administratively closed |
| Capacity: | 550 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/01/1900 |
| Date Perm Closure: | 03/01/1999 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

**45 MORRIS STREET ASSCIATES (Continued)** **U004439229**

| | |
|---|---|
| Tank Number: | 02 |
| Status: | 0. Administratively closed |
| Capacity: | 1000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/01/1900 |
| Date Perm Closure: | 03/01/1999 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 03 |
| Status: | 0. Administratively closed |
| Capacity: | 1000 |
| Product Stored: | 0009. Gasoline |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/01/1900 |
| Date Perm Closure: | 03/01/1999 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**R152** **PARKSIDE MANAGEMENT** **NY LTANKS** **S106125952**
**NE** **45 HAMILTON AVE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.192 mi.**
**1015 ft.** **Site 11 of 12 in cluster R**

**Relative:** **Higher**
**Actual:** **69 ft.**

LTANKS:

| | |
|---|---|
| Name: | PARKSIDE MANAGEMENT |
| Address: | 45 HAMILTON AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0307504 / 2005-04-10 |
| Facility ID: | 0307504 |
| Site ID: | 264349 |
| Spill Date: | 2003-10-16 |
| Spill Cause: | Tank Failure |

**PARKSIDE MANAGEMENT (Continued)** **S106125952**

| | |
|---|---|
| Spill Source: | Private Dwelling |
| Spill Class: | B4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2003-10-16 |
| CID: | 216 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2003-10-16 |
| Spill Record Last Update: | 2005-04-10 |
| Spiller Name: | DON SENILE |
| Spiller Company: | PARKSIDE MANAGEMENT |
| Spiller Address: | Not reported |
| Spiller County: | 001 |
| Spiller Contact: | KELLY BORN |
| Spiller Phone: | (732) 404-8100 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 215459 |
| Latitude: | 40.9220712 |
| Longitude: | -73.8978430 |
| DEC Memo: | 04/10/05 CASTLTON ENVIRONMENTAL DISPOSED OF LUST AND 23.73 TONS OF CONTAMINATED SOIL. BASED UPON THE CLOSURE INFORMATION SUBMITTED TO DEC, NO FURTHER ACTION IS REQUIRED AT THIS TIME. jod |
| Remarks: | OLD TANK REMOVED HAS HOLES IN IT WILL BE CLEANED UP |

All Materials:

| | |
|---|---|
| Site ID: | 264349 |
| Operable Unit ID: | 873913 |
| Operable Unit: | 01 |
| Material ID: | 501032 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**Y153** **SOUTH BROADWAY, INC.** **NY AST** **A100355615**
**ENE** **381 SOUTH BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.192 mi.**
**1016 ft.** **Site 1 of 23 in cluster Y**

**Relative:** WESTCHESTER CO. AST:
**Higher**

| | |
|---|---|
| Name: | SOUTH BROADWAY, INC. |
| Address: | 381 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY 10705 |

**Actual:**
**77 ft.**

**SOUTH BROADWAY, INC. (Continued)** **A100355615**

PBS Number: 3-601184
Site Status: Active
GDS Number: Not reported
Operator Name: South Broadway Management LLC
Owner Name: South Broadway Management LLC
Owner Street: P.O. Box 116
Owner Address2: Not reported
Owner City/State/Zip: Eastchester, NY 10709

Tank Number: 1
Status: 1. In-Service
Date Installation: 01/01/1990
Capacity: 2500
Product Stored: 0001. #2 Fuel Oil
Product Stored Percent: Not reported
Date Perm Closure: 01/01/1900
Tank Location: 3. Aboveground on saddles,legs,stilts,racks or cradle
Tank Type: 1. Steel/Carbon steel/Iron
Tank Internal Protection: 0. None
Tank External Protection: 0. None
Tank Leak Detection: 2. Manual Interstitial Monitoring
Tank Secondary Containment: 2. Vault (w/ access)
Piping Location: 1. Aboveground
Piping Type: 1. Steel/Carbon/ Steel/Iron
Piping External Protection: 0. None
Piping Leak Detection: 2. Manual Interstitial Monitoring
Piping Secondary Containment: 0. None
Overfill Prevention: 1. Float Vent Valve
Spill Prevention: 0. None
Dispenser: 3. Gravity

---

**S154** **LORDAE PROPERTY MANAGEMENT** **NY AST** **A100540431**
**East** **393 SOUTH BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.194 mi.**
**1026 ft.** **Site 7 of 14 in cluster S**

**Relative:** **Higher**
**Actual:** **77 ft.**

WESTCHESTER CO. AST:
Name: LORDAE PROPERTY MANAGEMENT
Address: 393 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705
PBS Number: 3-801434
Site Status: Unregulated
GDS Number: Not reported
Operator Name: Chris Santomero
Owner Name: Lordae Property Management
Owner Street: 78 North State Road, 2nd fl.
Owner Address2: Not reported
Owner City/State/Zip: Briarcliff Manor, NY 10510

Tank Number: 1
Status: 3. Closed - Removed
Date Installation: 01/01/1900
Capacity: 2000
Product Stored: 0001. #2 Fuel Oil
Product Stored Percent: Not reported
Date Perm Closure: 03/19/2009
Tank Location: 3. Aboveground on saddles,legs,stilts,racks or cradle

**LORDAE PROPERTY MANAGEMENT (Continued)** **A100540431**

| | |
|---|---|
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | Not reported |
| Piping Secondary Containment: | Not reported |
| Overfill Prevention: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

---

**S155** **CON EDISON** **NY MANIFEST** **S117739070**
**East** **OPP 393 S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10801**
**0.194 mi.**
**1026 ft.** **Site 8 of 14 in cluster S**

**Relative:** **Higher**
**Actual:** **77 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004721601 |
| Country: | USA |
| Name: | Con Edison |
| Address: | OPP 393 S BROADWAY |
| Address 2: | VS7621 |
| City,State,Zip: | YONKERS, NY 10801 |
| Zip 4: | Not reported |
| Location Address 1: | OPP 393 S BROADWAY |
| Location Address 2: | VS7621 |
| Location City,State,Zip: | YONKERS, NY 10801 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PL |
| Mailing Address 2: | 15TH FL |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/30/2015 |
| Trans1 Recv Date: | 01/30/2015 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 02/04/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |

**CON EDISON (Continued)** **S117739070**

| | |
|---|---|
| Generator EPA ID: | NYP004721601 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 014161905JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 75 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**T156** **450 RIVERDALE AVE LLC** **NY AST** **A100540242**
**SSW** **450 RIVERDALE AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.197 mi.**
**1038 ft.** **Site 4 of 5 in cluster T**

**Relative:** **Higher**

**Actual:** **102 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | 450 RIVERDALE AVE LLC |
| Address: | 450 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-802077 |
| Site Status: | Unregulated |
| GDS Number: | Not reported |
| Operator Name: | Frank Troia |
| Owner Name: | 450 Riverdale Ave LLC |
| Owner Street: | 450 Riverdale Ave |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10705 |
| Tank Number: | 01 |
| Status: | 3. Closed - Removed |

**450 RIVERDALE AVE LLC (Continued)** **A100540242**

| | |
|---|---|
| Date Installation: | 01/01/1900 |
| Capacity: | 2000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 1. Aboveground (contact w/ soil) |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | Not reported |
| Tank External Protection: | 0. None |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 3. Vault (w/ no access) |
| Piping Location: | 3. Aboveground/Underground Combination |
| Piping Type: | Not reported |
| Piping External Protection: | 1. Painted/Asphalt Coating |
| Piping Leak Detection: | Not reported |
| Piping Secondary Containment: | Not reported |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**Z157** **JOBO REALTY, LLC** **NY AST** **A100360979**
**NNW** **285 HAWTHORNE AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.198 mi.**
**1044 ft.** **Site 1 of 4 in cluster Z**

**Relative:** **Lower**
**Actual:** **47 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | JOBO REALTY, LLC |
| Address: | 285 HAWTHORNE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-104833 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | JOBO Realty LLC Agent |
| Owner Name: | Jobo Realty, LLC |
| Owner Street: | 52 Radford Street |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10705 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 10/01/1980 |
| Capacity: | 1500 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 1. Diking (aboveground only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 4. Fiberglass Coated Steel |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 6. Tank top sump |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |

**JOBO REALTY, LLC (Continued)** **A100360979**

Spill Prevention: 0. None
Dispenser: 2. Suction

---

**R158** **ALMONTE RESIDENCE** **NY LTANKS** **S107410427**
**NE** **33 MORRIS ST** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.199 mi.**
**1053 ft.** **Site 12 of 12 in cluster R**

**Relative:**
**Higher**

**Actual:**
**69 ft.**

LTANKS:

| | |
|---|---|
| Name: | ALMONTE RESIDENCE |
| Address: | 33 MORRIS ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0506537 / 2012-08-15 |
| Facility ID: | 0506537 |
| Site ID: | 351770 |
| Spill Date: | 2005-08-23 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2005-08-26 |
| CID: | 409 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-08-26 |
| Spill Record Last Update: | 2025-04-28 |
| Spiller Name: | BENANCIA ALMONTE |
| Spiller Company: | ALMONTE RESIDENCE |
| Spiller Address: | 33 MORRIS ST |
| Spiller County: | 001 |
| Spiller Contact: | BENANCIA ALMONTE |
| Spiller Phone: | (914) 562-3941 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 299045 |
| Latitude: | 40.9218890 |
| Longitude: | -73.8976120 |
| DEC Memo: | 7/30/10 Homeowner TTF JO'M 8/15/12 Upon Consultation with Albany and the Region all HO TTF's greater then 5 years old and no indications of contamination or problems will be closed. NFA JO'M |
| Remarks: | no remarks |

All TTF:

| | |
|---|---|
| Facility ID: | 0506537 |
| Spill Number: | 0506537 |
| Spill Tank Test: | 1549254 |
| Site ID: | 351770 |
| Tank Number: | 1 |
| Tank Size: | 1000 |

**ALMONTE RESIDENCE (Continued)** **S107410427**

| | |
|---|---|
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 99 |
| Test Method 2: | Alternate Test per former 613.5(a)(2)(v) |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 351770 |
| Operable Unit ID: | 1109275 |
| Operable Unit: | 01 |
| Material ID: | 2099269 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**W159** **CONSOLIDATED EDISON ELECTRIC** **E MANIFEST** **1031976800**
**ENE** **62 ELLIOTT AVE** **N/A**
**1/8-1/4** **BRONX, NY 10705**
**0.200 mi.**
**1054 ft.** **Site 3 of 6 in cluster W**

**Relative:** **Higher**

**Actual:** **78 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 017192272FLE |
| Last Updated Date: | 20220922 |
| Shipped Date: | 20220913 |
| Received Date: | 20220914 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Consolidated Edison Electric |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 62 ELLIOTT AVE |
| Generator Location Street 2: | Not reported |
| Generator Location City: | BRONX |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 116 SKYLINE DRIVE |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | SOUTH PLAINFIELD |
| Generator Mail Zip: | 07080 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |

**CONSOLIDATED EDISON ELECTRIC (Continued)** **1031976800**

| | |
|---|---|
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | KEARNY |
| Designated Facility Location Zip: | 07032 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

Transporter:

| | |
|---|---|
| Manifest Tracking Number: | 017192272FLE |
| Transporter Line Number: | 1 |
| Transporter EPA ID: | MAD039322250 |
| Transporter Name: | Clean Harbors Environmental Services Inc |

Waste Line:

| | |
|---|---|
| Manifest Tracking Number: | 017192272FLE |
| Waste Line Number: | 1 |
| U.S. DOT Hazardous Indicator: | Y |
| U.S. DOT ID Number: | NA3082 |
| U.S. DOT Description: | Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii |
| Non-Hazardous Waste Description: | Not reported |
| Number of Containers: | 1 |
| Container Type Code: | TT |
| Container Type Description: | Cargo tanks (tank trucks) |
| Waste Quantity: | 300 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.15 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.15 |
| Waste Quantity, in Kilograms: | 136.0545 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 136.0545 |
| Management Method Code: | H110 |
| Management Method Description: | STABILIZATION |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |

**CONSOLIDATED EDISON ELECTRIC (Continued)** **1031976800**

| | |
|---|---|
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | D008 |
| Quantity Haz Kg: | 136.0545 |
| Quantity Haz Tons: | 0.15 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | Not reported |

---

**Y160** **CON EDISON** **NY MANIFEST** **S117538487**
**East** **F/O 385 S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.200 mi.**
**1057 ft.** **Site 2 of 23 in cluster Y**

**Relative:**
**Higher**

**Actual:**
**78 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004711701 |
| Country: | USA |
| Name: | Con Edison |
| Address: | F/O 385 S BROADWAY |
| Address 2: | SB494 |
| City,State,Zip: | YONKERS, NY 10701 |
| Zip 4: | Not reported |
| Location Address 1: | F/O 385 S BROADWAY |
| Location Address 2: | SB494 |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PL |
| Mailing Address 2: | 15TH FL |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/04/2015 |
| Trans1 Recv Date: | 01/04/2015 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 01/08/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004711701 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |

**CON EDISON (Continued)** **S117538487**

| | |
|---|---|
| Manifest Tracking Number: | 013244410JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 25 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**T161** **280 DOBBS FERRY ROAD GEM LLC** **NY UST** **U004439191**
**SSW** **461 RIVERDALE AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.201 mi.**
**1059 ft.** **Site 5 of 5 in cluster T**

**Relative:** WESTCHESTER CO. UST:
**Higher**

| | |
|---|---|
| Name: | 280 DOBBS FERRY ROAD GEM LLC |
| Address: | 461 RIVERDALE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-449768 / Unregulated |
| Operator Name: | George Nukho |
| Owner Name: | 280 Dobbs Ferry Road GEM LLC |
| Owner Street: | 573 South Broadway |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10705 |
| GDS Number: | Not reported |
| Tank Number: | 1 |
| Status: | 4. Closed - in place |
| Capacity: | 5000 |
| Product Stored: | 0003. #6 Fuel Oil |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |

**Actual:**
**105 ft.**

**280 DOBBS FERRY ROAD GEM LLC (Continued)** **U004439191**

| | |
|---|---|
| Date Installation: | 01/01/1940 |
| Date Perm Closure: | 10/27/2015 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 5. Vent Whistle |
| Piping Secondary Containment: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

---

**Y162** **1 POST STREET** **NY AST** **U004187452**
**East** **1 POST STREET** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.201 mi.**
**1061 ft.** **Site 3 of 23 in cluster Y**

**Relative:** **Higher**

**Actual:** **77 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | 1 POST STREET |
| Address: | 1 POST STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-801032 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Post & Broadway, Inc. |
| Owner Name: | Post & Broadway, Inc. |
| Owner Street: | P.O. Box 116 |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Eastchester, NY 10709 |
| | |
| Tank Number: | 001 |
| Status: | 1. In-Service |
| Date Installation: | 01/01/1995 |
| Capacity: | 4000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 2. Aboveground (contact w/ impervious barrier) |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Leak Detection: | 2. Manual Interstitial Monitoring |
| Tank Secondary Containment: | 1. Diking (aboveground only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 2. Original sacrificial anode |
| Piping Leak Detection: | 2. Manual Interstitial Monitoring |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 1. Float Vent Valve |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

**S163** **CON EDISON** **RCRA NonGen / NLR** **1014398769**
**East** **POST ST & S BROADWAY** **NY MANIFEST** **NYP004211363**
**1/8-1/4** **YONKERS, NY 10701** **NJ MANIFEST**
**0.201 mi.**
**1063 ft.** **Site 9 of 14 in cluster S**

**Relative:** **Higher**
**Actual:** **77 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20200413 |
| Handler Name: | | Con Edison |
| Handler Address: | | Post St & S Broadway |
| Handler City,State,Zip: | | YONKERS, NY 10701 |
| EPA ID: | | NYP004211363 |
| Contact Name: | | Not reported |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | Not reported |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | Not reported |
| Mailing City,State,Zip: | | Not reported |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |

**CON EDISON (Continued)** **1014398769**

| | |
|---|---|
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20200413 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20100713 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20200413 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | No |
| Electronic Manifest Broker: | No |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

**CON EDISON (Continued)** **1014398769**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004211363 |
| Country: | USA |
| Name: | Consolidated Edison |
| Address: | POST ST & S BROADWAY |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10701 |
| Zip 4: | Not reported |
| Location Address 1: | POST ST & S. BROADWAY |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Consolidated Edison |
| Mailing Contact: | Thomas Teeling |
| Mailing Address 1: | 4 IRVING PL RM 828 |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/13/2010 |
| Trans1 Recv Date: | 07/13/2010 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/14/2010 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004211363 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 003533362JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | Y |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |

**CON EDISON (Continued)** **1014398769**

| | |
|---|---|
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 3000 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004211363 |
| Name: | CON EDISON |
| Address: | POST ST & S BROADWAY |
| City,State,Zip: | YONKERS, NY 10701 |
| County: | Not reported |
| Mailing Address: | 4 IRVING PL, RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | CHRISTOPHER BLAICH |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004211363 |
| Manifest Number: | 003533362JJK |
| Date Shipped: | 07/13/2010 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 07/13/2010 |
| Date Trans2 Transported Waste: | Not reported |

**CON EDISON (Continued)** **1014398769**

| | |
|---|---|
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 07/14/2010 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 3000 |
| Unit: | P |

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**S164** **CON EDISON** **NY MANIFEST** **S117319105**
**East** **S BROADWAY & POST ST** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.201 mi.**
**1063 ft.** **Site 10 of 14 in cluster S**

**Relative:** **Higher**
**Actual:** **77 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004667541 |
| Country: | USA |
| Name: | Con Edison |
| Address: | S BROADWAY & POST ST |
| Address 2: | MH 442 |
| City,State,Zip: | YONKERS, NY |
| Zip 4: | Not reported |
| Location Address 1: | S BROADWAY & POST ST |
| Location Address 2: | MH 442 |
| Location City,State,Zip: | YONKERS, NY |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |

**CON EDISON (Continued)** **S117319105**

Mailing Address 1: 4 IRVING PL 15TH FL
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

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**S165** **CON EDISON** **NY MANIFEST** **S117737634**
**East** **POST RD & S. BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.201 mi.**
**1063 ft.** **Site 11 of 14 in cluster S**

**Relative:**
**Higher**

**Actual:**
**77 ft.**

NY MANIFEST:
EPA ID: NYP004667655
Country: USA
Name: Con Edison
Address: POST RD & S. BROADWAY
Address 2: Not reported
City,State,Zip: YONKERS, NY 10701
Zip 4: Not reported
Location Address 1: POST RD & S. BROADWAY
Location Address 2: Not reported
Location City,State,Zip: YONKERS, NY 10701
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Con Edison
Mailing Address 1: 4 IRVING PL
Mailing Address 2: 15TH FL
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: Not reported

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJ0000027193
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 09/27/2014
Trans1 Recv Date: 09/27/2014
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/27/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004667655
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 012774611JJK

**CON EDISON (Continued)** **S117737634**

| | |
|---|---|
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 1500 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**S166** **CON EDISON SERVICE BOX: 443** **RCRA NonGen / NLR** **1016972804**
**East** **S BROADWAY & POST ST** **NY MANIFEST** **NYP004465860**
**1/8-1/4** **YONKERS, NY 10701**
**0.201 mi.**
**1063 ft.** **Site 12 of 14 in cluster S**

**Relative:**
**Higher**

**Actual:**
**77 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20140413 |
| Handler Name: | Con Edison Service Box: 443 |
| Handler Address: | S Broadway & Post St |
| Handler City,State,Zip: | YONKERS, NY 10701 |
| EPA ID: | NYP004465860 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | SENIOR SCIENTIST |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |

**CON EDISON SERVICE BOX: 443 (Continued)** **1016972804**

| | | |
|---|---|---|
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20141014 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Historic Generators:

| | | |
|---|---|---|
| Receive Date: | | 20140313 |
| Handler Name: | CON EDISON SERVICE BOX: | 443 |
| Federal Waste Generator Description: | | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | | Ny |
| Large Quantity Handler of Universal Waste: | | No |
| Recognized Trader Importer: | | No |

**CON EDISON SERVICE BOX: 443 (Continued)** **1016972804**

Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20140413
Handler Name: CON EDISON SERVICE BOX: 443
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:
EPA ID: NYP004465860
Country: USA
Name: Con Ed
Address: S BROADWAY & POST ST
Address 2: Not reported
City,State,Zip: YONKERS, NY 10701
Zip 4: Not reported
Location Address 1: SO BROADWAY AND POST
Location Address 2: SB 443
Location City,State,Zip: YONKERS, NY 10705
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Ed
Mailing Contact: Tom Teeling
Mailing Address 1: 4 IRVING PLACE - 15TH FLOOR
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

**CON EDISON SERVICE BOX: 443 (Continued)** **1016972804**

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 03/13/2014 |
| Trans1 Recv Date: | 03/13/2014 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 03/17/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004465860 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 012772682JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 10 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

**S167** **CON EDISON** **NY MANIFEST** **S117319102**
**East** **S BROADWAY & POST AVE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.201 mi.**
**1063 ft.** **Site 13 of 14 in cluster S**

**Relative:**
**Higher**

**Actual:**
**77 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004667515 |
| Country: | USA |
| Name: | Con Edison |
| Address: | S BROADWAY & POST AVE |
| Address 2: | MH 442 |
| City,State,Zip: | YONKERS, NY |
| Zip 4: | Not reported |
| Location Address 1: | S BROADWAY & POST AVE |
| Location Address 2: | MH 442 |
| Location City,State,Zip: | YONKERS, NY |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PL 15TH FL |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 09/26/2014 |
| Trans1 Recv Date: | 09/26/2014 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 09/30/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004667515 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 012771508JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CON EDISON (Continued)** **S117319102**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 100 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**AA168** **CON EDISON** **E MANIFEST** **1031965198**
**NE** **39 HAMITTON AVE** **N/A**
**1/8-1/4** **YOKERS, NY 10701**
**0.202 mi.**
**1067 ft.** **Site 1 of 2 in cluster AA**

**Relative:** **Higher**

**Actual:** **72 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 015837639FLE |
| Last Updated Date: | 20211005 |
| Shipped Date: | 20210921 |
| Received Date: | 20210922 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Con Edison |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 39 HAMITTON AVE |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YOKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10701 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 116 SKYLINE DRIVE |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | SOUTH PLAINFIELD |
| Generator Mail Zip: | 07080 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |

**CON EDISON (Continued)** **1031965198**

Designated Facility Mail State: NJ
Designated Facility Location Street Number: 105
Designated Facility Location Street 1: JACOBUS AVE
Designated Facility Location Street 2: Not reported
Designated Facility Location City: KEARNY
Designated Facility Location Zip: 07032
Designated Facility Location State: NJ
Designated Facility Contact Company Name: Not reported
Manifest Residue Indicator: N
Rejection Indicator: N

Transporter:
Manifest Tracking Number: 015837639FLE
Transporter Line Number: 1
Transporter EPA ID: MAD039322250
Transporter Name: Clean Harbors Environmental Services Inc

Waste Line:
Manifest Tracking Number: 015837639FLE
Waste Line Number: 1
U.S. DOT Hazardous Indicator: Y
U.S. DOT ID Number: NA3082
U.S. DOT Description: Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq (Lead)
Non-Hazardous Waste Description: Not reported
Number of Containers: 1
Container Type Code: TT
Container Type Description: Cargo tanks (tank trucks)
Waste Quantity: 200
Quantity Unit of Measure Code: P
Quantity Unit of Measure Description: Pounds
Waste Quantity, in Tons: 0.1
Acute Waste Quantity, in Tons: 0
Non-Acute Waste Quantity, in Tons: 0.1
Waste Quantity, in Kilograms: 90.703
Acute Waste Quantity, in Kilograms: 0
Non-Acute Waste Quantity, in Kilorgrams: 90.703
Management Method Code: H110
Management Method Description: STABILIZATION
Waste Residue Indicator: N
Quantity Discrepancy Indicator: N
Waste Type Discrepancy Indicator: N
Waste Density: Not reported
Waste Density Unit of Measure Code: Not reported
Waste Density Unit of Measure Description: Not reported
Form Code: Not reported
Form Code Description: Not reported
Source Code: Not reported
Source Code Description: Not reported
Waste Minimization Code: Not reported
Waste Minimization Code Description: Not reported
Consent Number: Not reported
EPA Waste Indicator: Y
Federal Waste Codes: D008
Quantity Haz Kg: 90.703
Quantity Haz Tons: 0.1
Quantity Non Haz Kg: 0

**CON EDISON (Continued)** **1031965198**

Quantity Non Haz Tons: 0
State Waste Codes: NY-T

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**Y169** **CON EDISON MANHOLE: 441** **RCRA NonGen / NLR** **1016967891**
**ENE** **379 S BROADWAY & MCLEAN AVE** **NY MANIFEST** **NYP004414900**
**1/8-1/4** **YONKERS, NY 10702**
**0.202 mi.**
**1068 ft.** **Site 4 of 23 in cluster Y**

**Relative:** **Higher**
**Actual:** **79 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20140208 |
| Handler Name: | | Con Edison Manhole: 441 |
| Handler Address: | | S Broadway & Mclean Ave |
| Handler City,State,Zip: | | YONKERS, NY 10702 |
| EPA ID: | | NYP004414900 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |

**CON EDISON MANHOLE: 441 (Continued)** **1016967891**

| | |
|---|---|
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20141014 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20140108 |
| Handler Name: CON EDISON MANHOLE: 441 | |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140208 |
| Handler Name: CON EDISON MANHOLE: 441 | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

**CON EDISON MANHOLE: 441 (Continued)** **1016967891**

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004414900 |
| Country: | USA |
| Name: | Con |
| Address: | 379 S BROADWAY & MCLEAN AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10702 |
| Zip 4: | Not reported |
| Location Address 1: | OPP 379 S BROADWAY & MCLEAN |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PLACE |
| Mailing Address 2: | 15TH FL |
| Mailing City,State,Zip: | NEW YORK, NY 10705 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/08/2014 |
| Trans1 Recv Date: | 01/08/2014 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 01/13/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004414900 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 011695192JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |

**CON EDISON MANHOLE: 441 (Continued)** **1016967891**

| | |
|---|---|
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 100 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**Y170** **373 SOUTH BROADWAY** **NY AST** **A100359205**
**ENE** **373 SOUTH BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.202 mi.**
**1069 ft.** **Site 5 of 23 in cluster Y**

**Relative:** **Higher**
**Actual:** **79 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | 373 SOUTH BROADWAY |
| Address: | 373 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-601185 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Jose Garrido |
| Owner Name: | South Broadway Management LLC |
| Owner Street: | P.O. Box 116 |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Eastchester, NY 10709 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 10/01/1990 |
| Capacity: | 3000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 2. Aboveground (contact w/ impervious barrier) |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | Not reported |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 6. Impervious Barrier/Concrete Pad (Aboveground Only) |
| Tank Secondary Containment: | 2. Vault (w/ access),10. Impervious Underlayment (AST Only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | Not reported |

**373 SOUTH BROADWAY (Continued)** **A100359205**

| | |
|---|---|
| Piping Leak Detection: | Not reported |
| Piping Secondary Containment: | Not reported |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only),5. Vent Whistle |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**AB171** **CONSOLIDATED EDISON** **NY MANIFEST** **1009238755**
**WNW** **45 FAIRFIELD RD & BEECHWOOD** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.203 mi.**
**1073 ft.** **Site 1 of 3 in cluster AB**

**Relative:**
**Lower**

**Actual:**
**50 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004052585 |
| Country: | USA |
| Name: | Consolidated Edison |
| Address: | 45 FAIRFIELD RD & BEECHWOOD |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY |
| Zip 4: | Not reported |
| Location Address 1: | 45 FAIRFIELD RD & BEECHWOOD |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Consolidated Edison |
| Mailing Contact: | Franklin Murray |
| Mailing Address 1: | 4 IRVING PLACE RM 828 |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124602808 |

Manifest Data:

| | |
|---|---|
| Document ID: | NYE0453285 |
| Manifest Status: | Not reported |
| Trans1 State ID: | 80010AB |
| Year: | 2000 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 04/02/2000 |
| Trans1 Recv Date: | 04/02/2000 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 04/03/2000 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004052585 |
| Trans1 EPA ID: | NYD006982359 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD980593636 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |

**CONSOLIDATED EDISON (Continued)** **1009238755**

| | |
|---|---|
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Benzene |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00009 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | NYE0086815 |
| Manifest Status: | Not reported |
| Trans1 State ID: | 10233AV |
| Year: | 2000 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 04/13/2000 |
| Trans1 Recv Date: | 04/13/2000 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 04/13/2000 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004052585 |
| Trans1 EPA ID: | NYD006982359 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD980593636 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Benzene |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00028 |

**CONSOLIDATED EDISON (Continued)** **1009238755**

Units: Gallons (liquids only)
Number of Containers: 001
Container Type: Metal drums, barrels, kegs
Handling Method: Treat
Specific Gravity: 01.00

Document ID: NYE0086850
Manifest Status: Not reported
Trans1 State ID: 10233AV
Year: 2000
Trans2 State ID: Not reported
Generator Ship Date: 04/03/2000
Trans1 Recv Date: 04/03/2000
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/04/2000
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004052585
Trans1 EPA ID: NYD006982359
Trans2 EPA ID: Not reported
TSDF ID 1: NYD980593636
TSDF ID 2: Not reported
Manifest Tracking Number: Not reported
Import Indicator: Not reported
Export Indicator: Not reported
Discr Quantity Indicator: Not reported
Discr Type Indicator: Not reported
Discr Residue Indicator: Not reported
Discr Partial Reject Indicator: Not reported
Discr Full Reject Indicator: Not reported
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: Not reported
Waste Code 1: Benzene
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 00003
Units: Gallons (liquids only)
Number of Containers: 001
Container Type: Metal drums, barrels, kegs
Handling Method: Treat
Specific Gravity: 01.00

Document ID: NYE0086872
Manifest Status: Not reported
Trans1 State ID: 10233AV
Year: 2000
Trans2 State ID: Not reported
Generator Ship Date: 04/17/2000
Trans1 Recv Date: 04/17/2000
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/18/2000
Part A Recv Date: Not reported

**CONSOLIDATED EDISON (Continued)** **1009238755**

| | |
|---|---|
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004052585 |
| Trans1 EPA ID: | NYD006982359 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD980593636 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Benzene |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00010 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | NYE0086894 |
| Manifest Status: | Not reported |
| Trans1 State ID: | 10233AV |
| Year: | 2000 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 04/20/2000 |
| Trans1 Recv Date: | 04/20/2000 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 04/21/2000 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004052585 |
| Trans1 EPA ID: | NYD006982359 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD980593636 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CONSOLIDATED EDISON (Continued)** **1009238755**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Benzene |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00004 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |

---

**S172** **CON EDISON SERVICE BOX: 440** **RCRA NonGen / NLR** **1016967885**
**East** **386 S BROADWAY** **NY MANIFEST** **NYP004414843**
**1/8-1/4** **YONKERS, NY 10702**
**0.207 mi.**
**1091 ft.** **Site 14 of 14 in cluster S**

**Relative:** **Higher**

**Actual:** **77 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20140208 |
| Handler Name: | Con Edison Service Box: 440 |
| Handler Address: | S Broadway |
| Handler City,State,Zip: | YONKERS, NY 10702 |
| EPA ID: | NYP004414843 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | SENIOR SCIENTIST |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |
| State District: | NYSDEC R2 |
| Mailing Address: | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Owner Name: | Not reported |
| Owner Type: | Not reported |
| Operator Name: | Not reported |
| Operator Type: | Not reported |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |

**CON EDISON SERVICE BOX: 440 (Continued)** **1016967885**

| | |
|---|---|
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20141014 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20140108 |
| Handler Name: CON EDISON SERVICE BOX: | 440 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140208 |
| Handler Name: CON EDISON SERVICE BOX: | 440 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |

**CON EDISON SERVICE BOX: 440 (Continued)** **1016967885**

Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:
EPA ID: NYP004414843
Country: USA
Name: Con Edison
Address: 386 S BROADWAY
Address 2: Not reported
City,State,Zip: YONKERS, NY 10702
Zip 4: Not reported
Location Address 1: F/O 386 SOUTH BROADWAY
Location Address 2: Not reported
Location City,State,Zip: YONKERS, NY 10705
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Con Edison
Mailing Address 1: 4 IRVING PLACE
Mailing Address 2: 15TH FL
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: Not reported

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 01/08/2014
Trans1 Recv Date: 01/08/2014
Trans2 Recv Date: Not reported
TSD Site Recv Date: 01/13/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004414843
Trans1 EPA ID: Not reported

**CON EDISON SERVICE BOX: 440 (Continued)** **1016967885**

| | |
|---|---|
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 011695191JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 20 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**AC173** **O CONNER HOME** **NY LTANKS** **S106972519**
**SSE** **30 ST ANDREWS PLACE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.207 mi.**
**1093 ft.** **Site 1 of 12 in cluster AC**

**Relative:** LTANKS:
**Higher**

| | |
|---|---|
| Name: | O CONNER HOME |
| Address: | 30 ST ANDREWS PLACE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0502485 / 2005-08-28 |
| Facility ID: | 0502485 |
| Site ID: | 346853 |
| Spill Date: | 2005-06-01 |
| Spill Cause: | Tank Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | B4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODee |
| Referred To: | Not reported |
| Reported to Dept: | 2005-06-01 |
| CID: | 444 |

**Actual:**
**87 ft.**

**O CONNER HOME (Continued)** **S106972519**

| | |
|---|---|
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-06-01 |
| Spill Record Last Update: | 2005-08-28 |
| Spiller Name: | JAMES O CONNER |
| Spiller Company: | O CONNER HOME |
| Spiller Address: | 30 ST ANDREWS PLACE |
| Spiller County: | 001 |
| Spiller Contact: | JAMES O CONNER |
| Spiller Phone: | (914) 376-6981 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 293115 |
| Latitude: | 40.9168100 |
| Longitude: | -73.8981690 |
| DEC Memo: | August 28, 2005: CASTLTON ENVIRONMENTAL DISPOSED OF LUST AND 78.38 TONS OF CONTAMINATED SOIL. GROUND WATER IMPACTED AND SAMPLED. BASED UPON INFORMATION PROVIDED TO DEC, NO FURTHER ACTION IS REQUIRED AT THIS TIME. jod |
| Remarks: | a 550 gallon tank had holes found while pulling: |

All Materials:

| | |
|---|---|
| Site ID: | 346853 |
| Operable Unit ID: | 1104610 |
| Operable Unit: | 01 |
| Material ID: | 584827 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**AC174** **CON EDISON** **NY MANIFEST** **S119075932**
**SE** **15 SAINT ANDREWS PL** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.207 mi.**
**1094 ft.** **Site 2 of 12 in cluster AC**

**Relative:**
**Higher**

**Actual:**
**85 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004795514 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 15 SAINT ANDREWS PL |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | OPP 15 ST ANDREWS PL |
| Location Address 2: | SB 1236 |
| Location City,State,Zip: | YONKERS, NY |

**CON EDISON (Continued)** **S119075932**

Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Dennis Huacon
Mailing Address 1: 4 IRVING PL 15TH FL
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 06/17/2015
Trans1 Recv Date: 06/17/2015
Trans2 Recv Date: Not reported
TSD Site Recv Date: 06/24/2015
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004795514
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 014467879JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 20

**CON EDISON (Continued)** **S119075932**

| | |
|---|---|
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**AC175** **CON EDISON** **NJ MANIFEST** **S120672901**
**SE** **15 SAINT ANDREWS PL** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.207 mi.**
**1094 ft.** **Site 3 of 12 in cluster AC**

**Relative:**
**Higher**

**Actual:**
**85 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004795514 |
| Name: | CON EDISON |
| Address: | 15 SAINT ANDREWS PL |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004795514 |
| Manifest Number: | 014467879JJK |
| Date Shipped: | 6/17/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |

**CON EDISON (Continued)** **S120672901**

| | |
|---|---|
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

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**AC176** **CON EDISON SERVICE BOX: 1236** **RCRA NonGen / NLR** **1017772413**
**SE** **15 ST ANDREWS PL FRONT OF** **FINDS** **NYP004493714**
**1/8-1/4** **YONKERS, NY 10702**
**0.207 mi.**
**1094 ft.** **Site 4 of 12 in cluster AC**

**Relative:** **Higher**
**Actual:** **85 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20140508 |
| Handler Name: | | Con Edison Service Box: 1236 |
| Handler Address: | | St Andrews Pl Front Of |
| Handler City,State,Zip: | | YONKERS, NY 10702 |
| EPA ID: | | NYP004493714 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |

**CON EDISON SERVICE BOX: 1236 (Continued)** **1017772413**

| | |
|---|---|
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150211 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20140408 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Large Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140408 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |

**CON EDISON SERVICE BOX: 1236 (Continued)** **1017772413**

| | |
|---|---|
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140508 |
| Handler Name: | CON EDISON SERVICE BOX: 1236 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110063777079

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

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**AC177** **AMCO/RAVAGO MFG AMERICA** **NY MANIFEST** **S116550943**
**SE** **15 ST ANDREWS PL FRONT OF** **N/A**
**1/8-1/4** **YONKERS, NY 10702**
**0.207 mi.**
**1094 ft.** **Site 5 of 12 in cluster AC**

**Relative:**
**Higher**

**Actual:**
**85 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004493714 |
| Country: | USA |
| Name: | Amco/Ravago Mfg America |
| Address: | 15 ST ANDREWS PL FRONT OF |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10702 |
| Zip 4: | Not reported |
| Location Address 1: | OPP 15 SAINT ANDREWS PL & 50 BROADWAY |
| Location Address 2: | SB 1236 |

**AMCO/RAVAGO MFG AMERICA (Continued)** **S116550943**

Location City,State,Zip: YONKERS, NY 10701
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Amco/Ravago Mfg America
Mailing Contact: Tom Teeling
Mailing Address 1: 4 IRVING PLACE - 15TH FLOOR
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 04/08/2014
Trans1 Recv Date: 04/08/2014
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/09/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004493714
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 012770806JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported

**AMCO/RAVAGO MFG AMERICA (Continued)** **S116550943**

| | |
|---|---|
| Quantity: | 20 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

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**AC178** **CON EDISON** **RCRA NonGen / NLR** **1019904244**
**SE** **15 SAINT ANDREWS PL** **NYP004795514**
**1/8-1/4** **YONKERS, NY 10705**
**0.207 mi.**
**1094 ft.** **Site 6 of 12 in cluster AC**

**Relative:** **Higher**
**Actual:** **85 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20150617 |
| Handler Name: | | Con Edison |
| Handler Address: | | Saint Andrews Pl |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYP004795514 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |

**CON EDISON (Continued)** **1019904244**

| | |
|---|---|
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160909 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20150617 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20150617 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

**CON EDISON (Continued)** **1019904244**

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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**AD179** **CONSOLIDATED EDISON COMPANY OF NY** **E MANIFEST** **1031975481**
**East** **410 S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.211 mi.**
**1112 ft.** **Site 1 of 6 in cluster AD**

**Relative:**
**Higher**

**Actual:**
**80 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 006654587GBF |
| Last Updated Date: | 20211208 |
| Shipped Date: | 20211126 |
| Received Date: | 20211201 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Consolidated Edison Company Of Ny |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 410 S BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 36 BUTLER ST |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | ELIZABETH |
| Generator Mail Zip: | 07206 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | KEARNY |
| Designated Facility Location Zip: | 07032 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

Transporter:

| | |
|---|---|
| Manifest Tracking Number: | 006654587GBF |

**CONSOLIDATED EDISON COMPANY OF NY (Continued)** **1031975481**

Transporter Line Number: 1
Transporter EPA ID: NJD003812047
Transporter Name: Acv Environmental Services Inc.

Waste Line:
Manifest Tracking Number: 006654587GBF
Waste Line Number: 1
U.S. DOT Hazardous Indicator: Y
U.S. DOT ID Number: NA3082
U.S. DOT Description: Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq
Non-Hazardous Waste Description: Not reported
Number of Containers: 1
Container Type Code: TT
Container Type Description: Cargo tanks (tank trucks)
Waste Quantity: 1000
Quantity Unit of Measure Code: P
Quantity Unit of Measure Description: Pounds
Waste Quantity, in Tons: 0.5
Acute Waste Quantity, in Tons: 0
Non-Acute Waste Quantity, in Tons: 0.5
Waste Quantity, in Kilograms: 453.515
Acute Waste Quantity, in Kilograms: 0
Non-Acute Waste Quantity, in Kilorgrams: 453.515
Management Method Code: H110
Management Method Description: STABILIZATION
Waste Residue Indicator: N
Quantity Discrepancy Indicator: N
Waste Type Discrepancy Indicator: N
Waste Density: Not reported
Waste Density Unit of Measure Code: Not reported
Waste Density Unit of Measure Description: Not reported
Form Code: Not reported
Form Code Description: Not reported
Source Code: Not reported
Source Code Description: Not reported
Waste Minimization Code: Not reported
Waste Minimization Code Description: Not reported
Consent Number: Not reported
EPA Waste Indicator: Y
Federal Waste Codes: D008
Quantity Haz Kg: 453.515
Quantity Haz Tons: 0.5
Quantity Non Haz Kg: 0
Quantity Non Haz Tons: 0
State Waste Codes: NY-T

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**AD180** **BANK OF NEW YORK** **NY LTANKS** **S105054642**
**East** **410 S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.211 mi.**
**1112 ft.** **Site 2 of 6 in cluster AD**

**Relative:**
**Higher**

**Actual:**
**80 ft.**

LTANKS:
Name: BANK OF NEW YORK
Address: 410 S BROADWAY
City,State,Zip: YONKERS, NY
Spill Number/Closed Date: 0100575 / 2002-04-23

**BANK OF NEW YORK (Continued)** **S105054642**

| | |
|---|---|
| Facility ID: | 0100575 |
| Site ID: | 87541 |
| Spill Date: | 2001-04-16 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | WCHD |
| Referred To: | Westchester Cnty Health Dept |
| Reported to Dept: | 2001-04-16 |
| CID: | 205 |
| Water Affected: | Not reported |
| Spill Notifier: | Responsible Party |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2001-04-16 |
| Spill Record Last Update: | 2002-06-13 |
| Spiller Name: | FRANK PICUCCI |
| Spiller Company: | BANK OF NEW YORK |
| Spiller Address: | 410 S BROADWAY |
| Spiller County: | 001 |
| Spiller Contact: | CALLER |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 80202 |
| Latitude: | 40.9192278 |
| Longitude: | -73.8962989 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was WCDOH 04/23/02 Letter from Christopher Lalak (WCHD) Report from Environmental Management Services reviewed. NFA required from WCHD. |
| Remarks: | fail test. |

All TTF:

| | |
|---|---|
| Facility ID: | 0100575 |
| Spill Number: | 0100575 |
| Spill Tank Test: | 1526226 |
| Site ID: | 87541 |
| Tank Number: | 1 |
| Tank Size: | 2000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 20 |
| Test Method 2: | USTest 2000/P/LL plus USTest 2000/U |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

**BANK OF NEW YORK (Continued)** **S105054642**

| | |
|---|---|
| Site ID: | 87541 |
| Operable Unit ID: | 839426 |
| Operable Unit: | 01 |
| Material ID: | 536291 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**AD181** **THE BANK OF NEW YORK** **NY UST** **U004441912**
**East** **410 SOUTH BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10702**
**0.211 mi.**
**1112 ft.** **Site 3 of 6 in cluster AD**

**Relative:** WESTCHESTER CO. UST:
**Higher**

| | |
|---|---|
| Name: | THE BANK OF NEW YORK |
| Address: | 410 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY 10702 |
| Id/Status: | 3-078980 / Unregulated: <1101 gal. PBS |
| Operator Name: | The Bank Of New York |
| Owner Name: | North American Reassurance Co |
| Owner Street: | 100 E 46 Street |
| Owner Address2: | Not reported |
| Owner City: | New York |
| Owner State: | NY |
| Owner Zipcode: | 10017 |
| GDS Number: | Not reported |
| | |
| Tank Number: | 1 |
| Status: | 3. Closed - Removed |
| Capacity: | 2000 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | 03/19/2002 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 3. Aboveground/underground combination |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 5. Vent Whistle |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | Not reported |
| Dispenser: | 2. Suction |

**Actual:**
**80 ft.**

**AB182** **BYRNE - TTF** **NY LTANKS** **S113820386**
**WNW** **58 BEECHWOOD TERRACE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.211 mi.**
**1115 ft.** **Site 2 of 3 in cluster AB**

**Relative:** LTANKS:
**Lower**

**Actual:**
**50 ft.**

| | |
|---|---|
| Name: | BYRNE - TTF |
| Address: | 58 BEECHWOOD TERRACE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1304519 / 2014-01-27 |
| Facility ID: | 1304519 |
| Site ID: | 485044 |
| Spill Date: | 2013-07-25 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2013-07-25 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2013-07-25 |
| Spill Record Last Update: | 2014-01-27 |
| Spiller Name: | TOM BYRNE |
| Spiller Company: | BYRNE |
| Spiller Address: | 58 BEECHWOOD TERRACE |
| Spiller County: | 999 |
| Spiller Contact: | JOSEPHINE/ VALLEY OIL |
| Spiller Phone: | (914) 965-6397 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 440187 |
| Latitude: | 40.9206117 |
| Longitude: | -73.9050286 |
| DEC Memo: | 7-25-13: V.Mc. call to Ms.Josephine/Val.Oil: Paul, not in, handling site, to callbk. 7/26/13: Callback to the dispatch desk from Paul at Valley Oil. Home owner's name is Tom Byrne C:917-848-1354. Pau; states this is a vaulted 1K tank in the basement. He states he has already spoken with the owner about this and Castlton Environmental has been contacted to remove the tank next week. I sent a message to Castlton asking for confirmation. jod *Castlton confirms they are making arrangements to remove the tank and will update DEC. jod Update from Castlton::8/21/2013 11:11:31 AM: I have secured all paperwork for Mr. Byrne for removal of 1-1000 gallon AST located in basement- upon issue of permit project will be scheduled and we will inform you of our findings jod 01/22/14 Castlton Environmental repoted that they excavated andremoved that tank along with 10.09 tons of contaminated soil. NFA. TG |
| Remarks: | vaulted basement tank failed test |

**BYRNE - TTF (Continued)** **S113820386**

All TTF:

| | |
|---|---|
| Facility ID: | 1304519 |
| Spill Number: | 1304519 |
| Spill Tank Test: | 2493945 |
| Site ID: | 485044 |
| Tank Number: | 1 |
| Tank Size: | 1000 |
| Material: | 0001 |
| EPA UST: | False |
| UST: | True |
| Cause: | 99 |
| Source: | 00 |
| Test Method: | NN |
| Test Method 2: | Testing Not Required |
| Leak Rate: | Not reported |
| Gross Fail: | Not reported |
| Modified By: | JBODEE |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 485044 |
| Operable Unit ID: | 1234718 |
| Operable Unit: | 01 |
| Material ID: | 2233786 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Site ID: | 485044 |
| Operable Unit ID: | 1234718 |
| Operable Unit: | 01 |
| Material ID: | 2233787 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

**AE183** **CONSOLIDATED EDISON ELECTRIC** **E MANIFEST** **1031977075**
**South** **GRAY PL & VALENTINES LN** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.212 mi.**
**1117 ft.** **Site 1 of 7 in cluster AE**

**Relative:**
**Higher**

**Actual:**
**114 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 017443395FLE |
| Last Updated Date: | 20221011 |
| Shipped Date: | 20221003 |
| Received Date: | 20221004 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Consolidated Edison Electric |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | GRAY PL & VALENTINES LN |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 116 SKYLINE DRIVE |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | SOUTH PLAINFIELD |
| Generator Mail Zip: | 07080 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | KEARNY |
| Designated Facility Location Zip: | 07032 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

Transporter:

| | |
|---|---|
| Manifest Tracking Number: | 017443395FLE |
| Transporter Line Number: | 1 |
| Transporter EPA ID: | MAD039322250 |
| Transporter Name: | Clean Harbors Environmental Services Inc |

Waste Line:

| | |
|---|---|
| Manifest Tracking Number: | 017443395FLE |
| Waste Line Number: | 1 |
| U.S. DOT Hazardous Indicator: | Y |
| U.S. DOT ID Number: | NA3082 |

**CONSOLIDATED EDISON ELECTRIC (Continued)** **1031977075**

| | |
|---|---|
| U.S. DOT Description: | Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq |
| Non-Hazardous Waste Description: | Not reported |
| Number of Containers: | 1 |
| Container Type Code: | TT |
| Container Type Description: | Cargo tanks (tank trucks) |
| Waste Quantity: | 400 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.2 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.2 |
| Waste Quantity, in Kilograms: | 181.406 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 181.406 |
| Management Method Code: | H110 |
| Management Method Description: | STABILIZATION |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | Y |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | D008 |
| Quantity Haz Kg: | 181.406 |
| Quantity Haz Tons: | 0.2 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-T |

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**AE184** **CON EDISON MANHOLE 680** **RCRA NonGen / NLR** **1014918154**
**South** **VALENTINE LN & GRAY PL** **NY MANIFEST** **NYP004217380**
**1/8-1/4** **YONKERS, NY 10710** **NJ MANIFEST**
**0.212 mi.**
**1117 ft.** **Site 2 of 7 in cluster AE**

**Relative:** **Higher**

**Actual:** **114 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20101106 |
| Handler Name: | Con Edison Manhole 680 |
| Handler Address: | Valentine Ln & Gray Pl |
| Handler City,State,Zip: | YONKERS, NY 10710 |
| EPA ID: | NYP004217380 |
| Contact Name: | DENNIS ROHRER |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 914-925-6219 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | SR SPECIALIST |
| EPA Region: | 02 |
| Land Type: | Private |

**CON EDISON MANHOLE 680 (Continued)** **1014918154**

| | | |
|---|---|---|
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL RM 828 |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20110701 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20101007 |

**CON EDISON MANHOLE 680 (Continued)** **1014918154**

Handler Name: CON EDISON MANHOLE 680
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20101106
Handler Name: CON EDISON MANHOLE 680
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:
EPA ID: NYP004217380
Country: USA
Name: Consolidated Edison
Address: VALENTINE LN & GRAY PL
Address 2: Not reported
City,State,Zip: YONKERS, NY 10710
Zip 4: Not reported
Location Address 1: MH680 - VALENTINE LANE E/O GRAY PL
Location Address 2: Not reported
Location City,State,Zip: YONKERS, NY
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Consolidated Edison
Mailing Contact: Thomas Teeling
Mailing Address 1: 4 IRVING PL RM 828

**CON EDISON MANHOLE 680 (Continued)** **1014918154**

Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 10/07/2010
Trans1 Recv Date: 10/07/2010
Trans2 Recv Date: Not reported
TSD Site Recv Date: 10/08/2010
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004217380
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 007656943JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: Y
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H111
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 200
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

NJ MANIFEST:

**CON EDISON MANHOLE 680 (Continued)** **1014918154**

| | |
|---|---|
| EPA ID: | NYP004217380 |
| Name: | CON EDISON MANHOLE 680 |
| Address: | VALENTINE LN & GRAY PL |
| City,State,Zip: | YONKERS, NY 10710 |
| County: | Not reported |
| Mailing Address: | IRVING PL RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | DENNIS ROHRER |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004217380 |
| Manifest Number: | 007656943JJK |
| Date Shipped: | 10/07/2010 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 10/07/2010 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 10/08/2010 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |

**CON EDISON MANHOLE 680 (Continued)** **1014918154**

Manifest Discrepancy Type: Not reported
Data Entry Number: Not reported
Was Load Rejected: N
Reason Load Was Rejected: Not reported

Waste:
Manifest Year: Not reported
Waste Code: D008
Hand Code: H111
Quantity: 200
Unit: P

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**AE185** **CON EDISON TRANSFORMER MANHOLE: 684** **RCRA NonGen / NLR** **1016968406**
**South** **GRAY PL & VALENTINE LN** **NY MANIFEST** **NYP004420170**
**1/8-1/4** **YONKERS, NY 10710**
**0.212 mi.**
**1117 ft.** **Site 3 of 7 in cluster AE**

**Relative:** **Higher**
**Actual:** **114 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20140216 |
| Handler Name: | | Con Edison Transformer Manhole: 684 |
| Handler Address: | | Gray Pl & Valentine Ln |
| Handler City,State,Zip: | | YONKERS, NY 10710 |
| EPA ID: | | NYP004420170 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |

**CON EDISON TRANSFORMER MANHOLE: 684 (Continued)** **1016968406**

| | |
|---|---|
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20141014 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20140116 |
| Handler Name: | CON EDISON TRANSFORMER MANHOLE: 684 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140216 |
| Handler Name: | CON EDISON TRANSFORMER MANHOLE: 684 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |

**CON EDISON TRANSFORMER MANHOLE: 684 (Continued)** **1016968406**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:
EPA ID: NYP004420170
Country: USA
Name: Con Edison
Address: GRAY PL & VALENTINE LN
Address 2: Not reported
City,State,Zip: YONKERS, NY 10710
Zip 4: Not reported
Location Address 1: GRAY PL N/O VALENTINE LANE
Location Address 2: Not reported
Location City,State,Zip: YONKERS, NY 10705
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Con Edison
Mailing Address 1: 4 IRVING PLACE
Mailing Address 2: 15TH FL
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: Not reported

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 01/16/2014
Trans1 Recv Date: 01/16/2014
Trans2 Recv Date: Not reported
TSD Site Recv Date: 01/17/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004420170
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046

**CON EDISON TRANSFORMER MANHOLE: 684 (Continued)** **1016968406**

| | |
|---|---|
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 011696177JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 270 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

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**AE186** **CON EDISON TRANSFORMER MANHOLE 684** **RCRA NonGen / NLR** **1014918081**
**South** **GRAY PL & VALENTINE LANE** **NY MANIFEST** **NYP004216646**
**1/8-1/4** **YONKERS, NY 10705** **NJ MANIFEST**
**0.212 mi.**
**1117 ft.** **Site 4 of 7 in cluster AE**

**Relative:** **Higher**

**Actual:** **114 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20101027 |
| Handler Name: | Con Edison Transformer Manhole 684 |
| Handler Address: | Gray Pl & Valentine Lane |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYP004216646 |
| Contact Name: | DONALD SENNO |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 914-925-6219 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | SR SPECIALIST |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |

**CON EDISON TRANSFORMER MANHOLE 684 (Continued)** **1014918081**

| | | |
|---|---|---|
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL RM 828 |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20110701 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20100927 |
| Handler Name: | CON EDISON TRANSFORMER MANHOLE 684 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |

**CON EDISON TRANSFORMER MANHOLE 684 (Continued)** **1014918081**

| | |
|---|---|
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20101027 |
| Handler Name: | CON EDISON TRANSFORMER MANHOLE 684 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004216646 |
| Country: | USA |
| Name: | Consolidated Edison |
| Address: | GRAY PL & VALENTINE LANE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | GRAY PL W.S 33’ NNC VALENTINE AV |
| Location Address 2: | TM 684 |
| Location City,State,Zip: | YONKERS, NY |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Consolidated Edison |
| Mailing Contact: | Tom Teeling |
| Mailing Address 1: | 4 IRVING PLACE RM 828 |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |

**CON EDISON TRANSFORMER MANHOLE 684 (Continued)** **1014918081**

Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 09/27/2010
Trans1 Recv Date: 09/27/2010
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/28/2010
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004216646
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 007656973JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: Y
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H111
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 600
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

NJ MANIFEST:
EPA ID: NYP004216646
Name: CON EDISON TRANSFORMER MANHOLE 684
Address: GRAY PL & VALENTINE LANE
City,State,Zip: YONKERS, NY 10705

**CON EDISON TRANSFORMER MANHOLE 684 (Continued)** **1014918081**

| | |
|---|---|
| County: | Not reported |
| Mailing Address: | IRVING PL RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | DONALD SENNO |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004216646 |
| Manifest Number: | 007656973JJK |
| Date Shipped: | 09/27/2010 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 09/27/2010 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 09/28/2010 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

**CON EDISON TRANSFORMER MANHOLE 684 (Continued)** **1014918081**

Waste:
- Manifest Year: Not reported
- Waste Code: D008
- Hand Code: H111
- Quantity: 600
- Unit: P

---

**AA187** **CON EDISON SERVICE BOX: 1087** **RCRA NonGen / NLR** **1016968439**
**NE** **25 MORRIS ST** **NY MANIFEST** **NYP004420501**
**1/8-1/4** **YONKERS, NY 10710**
**0.213 mi.**
**1122 ft.** **Site 2 of 2 in cluster AA**

**Relative:** **Higher**
**Actual:** **76 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20140216 |
| Handler Name: | | Con Edison Service Box: 1087 |
| Handler Address: | | Morris St |
| Handler City,State,Zip: | | YONKERS, NY 10710 |
| EPA ID: | | NYP004420501 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |

**CON EDISON SERVICE BOX: 1087 (Continued)** **1016968439**

| | |
|---|---|
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20141014 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20140116 |
| Handler Name: CON EDISON SERVICE BOX: | 1087 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140216 |
| Handler Name: CON EDISON SERVICE BOX: | 1087 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

**CON EDISON SERVICE BOX: 1087 (Continued)** **1016968439**

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004420501 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 25 MORRIS ST |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10710 |
| Zip 4: | Not reported |
| Location Address 1: | 25 MORRIS ST |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKER, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | C |
| Mailing Address 1: | 4 IRVING PLACE |
| Mailing Address 2: | 15TH FL |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/16/2014 |
| Trans1 Recv Date: | 01/16/2014 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 01/17/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004420501 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 011696186JJK |
| Import Indicator: | N |

**CON EDISON SERVICE BOX: 1087 (Continued)** **1016968439**

| | |
|---|---|
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 90 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**AD188** **RITE AID #02541** **NY Spills** **1000383443**
**East** **420 S BROADWAY** **RCRA NonGen / NLR** **NYD986888733**
**1/8-1/4** **YONKERS, NY 10705** **E MANIFEST**
**0.213 mi.**
**1123 ft.** **Site 4 of 6 in cluster AD**

**Relative:**
**Higher**

**Actual:**
**80 ft.**

SPILLS:

| | |
|---|---|
| Name: | VACANT BLDG |
| Address: | 416-420 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0702918 / 2010-08-31 |
| Facility ID: | 0702918 |
| Facility Type: | ER |
| DER Facility ID: | 332181 |
| Site ID: | 382737 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2007-06-11 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2007-06-11 |
| CID: | 410 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Local Agency |
| Cleanup Ceased: | Not reported |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2007-06-11 |
| Spill Record Last Update: | 2010-08-31 |
| Spiller Name: | DENNIS MONASEBIAN |
| Spiller Company: | MONASEBIAN PROPERTY |
| Spiller Address: | 416-420 SOUTH BROADWAY |
| Spiller Company: | 999 |
| Contact Name: | VIC RICCHEZZA |
| Latitude: | 40.9190820 |
| Longitude: | -73.8962981 |
| DEC Memo: | 06/14/07 Property owner Dennis Momaseviam called and stated that he will have Airtek send the report to T Ghiosay. TG 06/27/07 Subsurface Investigation Report submitted by Airtek. Report documents the installation of 3 boring in the basement floor where goundwater contamination was detected in a shallow water table less that 2 feet below. Report also concudes that visual evidence of some liquid has been forced up through cracks in the basement slab. 07/05/07 Mike Zouck of Airtek called to discuss the report and looking for DEC requirements. He was advised to locate the source of the conamination though addtional borings. He agreed and he also plans on doing some indoor air testing for the property owner. 08/07/07 Site meeting with Mike Zouck of Airtek and Dennis Momaseviam. GW contamination present in area right near oil stained floor. The building is presently on gas but two oil fired boilers were in the basement at some time in the past. Old oil lines were visable in the basement. The owner wants to resolve issue ASAP since a new tenant will not move into the sapce with this oil condition. Recommended breaking up the concrete floor and removing the impacted soil. TG 01/28/08 Subsurface remport submitted by Airtek. 18 test pits were dug throughout the basement. Twelve of 18 (12/18) contained free product in varying amounts. 02/25/08 Met with property owner , Dennis Monasaebian and Airtek geologist Vic Riccezza observe the conditions of the groundwater and discuss remedial options. D Monasebian proposed ORC but this idea was rejected due to the large amount of free product in many of the the pits. Advised him to install a pump and treat system. He agreed and will develop a plan. TG |
| Remarks: | SOIL BORINGS WERE TAKEN AND SENT FOR TESTING, HOWEVER VISUAL CONTAMINATION IS PRESENT: WATER SAMPLES WERE ALSO TAKEN: |

All Materials:

| | |
|---|---|
| Site ID: | 382737 |
| Operable Unit ID: | 1140122 |
| Operable Unit: | 01 |
| Material ID: | 2130170 |
| Material Code: | 0066A |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Material Name: | unknown petroleum |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20231018 |
| Handler Name: | | Rite Aid #02541 |
| Handler Address: | | S Broadway |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYD986888733 |
| Contact Name: | | JOSEPH A CHEST |
| Contact Address: | | PO BOX 3165 |
| Contact City,State,Zip: | | HARRISBURG, PA 17105 |
| Contact Telephone: | | 717-975-8643 |
| Contact Fax: | | 717-972-3989 |
| Contact Email: | | EHS@RITEAID.COM |
| Contact Title: | | MANAGER ENVIRONMENTAL HEALTH SERVICES |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R3 |
| Mailing Address: | | PO BOX 3165 |
| Mailing City,State,Zip: | | HARRISBURG, PA 17105 |
| Owner Name: | 416 Owners Assoc Lp | |
| Owner Type: | | Private |
| Operator Name: | Rite Aid Of New York Inc | |
| Operator Type: | | Private |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20231019 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Hazardous Waste Summary:

| | |
|---|---|
| Waste Code: | D001 |
| Waste Description: | Ignitable Waste |
| Waste Code: | D002 |
| Waste Description: | Corrosive Waste |
| Waste Code: | D005 |
| Waste Description: | Barium |
| Waste Code: | D007 |
| Waste Description: | Chromium |
| Waste Code: | D009 |
| Waste Description: | Mercury |
| Waste Code: | D010 |
| Waste Description: | Selenium |
| Waste Code: | D011 |
| Waste Description: | Silver |
| Waste Code: | D013 |
| Waste Description: | Lindane (1,2,3,4,5,6-Hexa-Chlorocyclohexane, Gamma Isomer) |
| Waste Code: | D016 |
| Waste Description: | 2,4-D (2,4-Dichlorophenoxyacetic Acid) |
| Waste Code: | D018 |
| Waste Description: | Benzene |
| Waste Code: | D022 |
| Waste Description: | Chloroform |
| Waste Code: | D024 |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Waste Description: | M-Cresol |
| Waste Code: | D026 |
| Waste Description: | Cresol |
| Waste Code: | D027 |
| Waste Description: | 1,4-Dichlorobenzene |
| Waste Code: | D035 |
| Waste Description: | Methyl Ethyl Ketone |
| Waste Code: | P001 |
| Waste Description: | 2h-1-Benzopyran-2-One, 4-Hydroxy-3-(3-Oxo-1-Phenylbutyl)-, & Salts, When Present At Concentrations Greater Than 0.3% (Or) Warfarin, & Salts, When Present At Concentrations Greater Than 0.3% |
| Waste Code: | P075 |
| Waste Description: | Nicotine, & Salts (Or) Pyridine, 3-(1-Methyl-2-Pyrrolidinyl)-,(S)-, & Salts |
| Waste Code: | U002 |
| Waste Description: | 2-Propanone (I) (Or) Acetone (I) |
| Waste Code: | U035 |
| Waste Description: | Benzenebutanoic Acid, 4-[Bis(2-Chloroethyl)Amino]- (Or) Chlorambucil |
| Waste Code: | U044 |
| Waste Description: | Chloroform (Or) Methane, Trichloro- |
| Waste Code: | U058 |
| Waste Description: | 2h-1,3,2-Oxazaphosphorin-2-Amine, N,N-Bis(2-Chloroethyl)Tetrahydro-, 2-Oxide (Or) Cyclophosphamide |
| Waste Code: | U072 |
| Waste Description: | Benzene, 1,4-Dichloro- (Or) P-Dichlorobenzene |
| Waste Code: | U122 |
| Waste Description: | Formaldehyde |
| Waste Code: | U129 |
| Waste Description: | Cyclohexane, 1,2,3,4,5,6-Hexachloro-, (1alpha, 2alpha, 3beta, 4alpha, 5alpha, 6beta)- (Or) Lindane |
| Waste Code: | U154 |
| Waste Description: | Methanol (I) (Or) Methyl Alcohol (I) |
| Waste Code: | U165 |
| Waste Description: | Naphthalene |
| Waste Code: | U188 |
| Waste Description: | Phenol |
| Waste Code: | U201 |
| Waste Description: | 1,3-Benzenediol (Or) Resorcinol |
| Waste Code: | U205 |
| Waste Description: | Selenium Sulfide (Or) Selenium Sulfide Ses2 (R,T) |

**RITE AID #02541 (Continued)** **1000383443**

Waste Code: U211
Waste Description: Carbon Tetrachloride (Or) Methane, Tetrachloro-

Waste Code: U240
Waste Description: 2,4-D, Salts & Esters (Or) Acetic Acid, (2,4-Dichlorophenoxy)-, Salts & Esters (Or) Dichlorophenoxyacetic Acid 2,4-D

Waste Code: U279
Waste Description: U279

Handler - Owner Operator:
Owner/Operator Indicator: Operator
Owner/Operator Name: RITE AID OF NEW YORK INC
Legal Status: Private
Date Became Current: 19900730
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: RITE AID OF NEW YORK INC
Legal Status: Private
Date Became Current: 19900730
Date Ended Current: Not reported
Owner/Operator Address: 30 HUNTER LN
Owner/Operator City,State,Zip: CAMP HILL, PA 17011
Owner/Operator Telephone: 717-761-2633
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: 717-972-3989
Owner/Operator Email: EHS@RITEAID.COM

Owner/Operator Indicator: Operator
Owner/Operator Name: RITE AID CORP
Legal Status: Private
Date Became Current: 19900730
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: RITE AID OF NEW YORK
Legal Status: Private
Date Became Current: 19900730
Date Ended Current: Not reported
Owner/Operator Address: 30 HUNTER LANE
Owner/Operator City,State,Zip: CAMP HILL, PA 17011
Owner/Operator Telephone: 717-761-2633
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Owner/Operator Email: | Not reported |
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: 416 OWNERS ASSOC LP | |
| Legal Status: | Private |
| Date Became Current: | 20060501 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | PO BOX 488 |
| Owner/Operator City,State,Zip: | ARMONK, NY 10504 |
| Owner/Operator Telephone: | 914-273-8064 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: RITE AID CORP | |
| Legal Status: | Private |
| Date Became Current: | 19900730 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 30 HUNTER LANE |
| Owner/Operator City,State,Zip: | CAMP HILL, PA 17011 |
| Owner/Operator Telephone: | 717-761-2633 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: 416 OWNERS ASSOC LP | |
| Legal Status: | Private |
| Date Became Current: | 20060501 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | PO BOX 488 |
| Owner/Operator City,State,Zip: | ARMONK, NY 10504 |
| Owner/Operator Telephone: | 914-273-8064 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: RITE AID OF NEW YORK INC | |
| Legal Status: | Private |
| Date Became Current: | 19900730 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | PO BOX 3165 |
| Owner/Operator City,State,Zip: | HARRISBURG, PA 17105 |
| Owner/Operator Telephone: | 717-761-2633 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | 717-972-3989 |
| Owner/Operator Email: | EHS@RITEAID.COM |
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: RITE AID | |
| Legal Status: | Private |
| Date Became Current: | 19900730 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | Not reported |
| Owner/Operator City,State,Zip: | Not reported |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Owner/Operator Telephone: | Not reported |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |
| | |
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: NEIL WIESSMAN | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | NOT REQUIRED |
| Owner/Operator City,State,Zip: | NOT REQUIRED, WY 99999 |
| Owner/Operator Telephone: | 212-555-1212 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |
| | |
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: 416 OWNERS ASSOC LP | |
| Legal Status: | Private |
| Date Became Current: | 20060501 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | PO BOX 488 |
| Owner/Operator City,State,Zip: | ARMONK, NY 10504 |
| Owner/Operator Telephone: | 914-273-8064 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |
| | |
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: 416 OWNERS ASSOC LP | |
| Legal Status: | Private |
| Date Became Current: | 20060501 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | PO BOX 488 |
| Owner/Operator City,State,Zip: | ARMONK, NY 10504 |
| Owner/Operator Telephone: | 914-273-8064 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |
| | |
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: RITE AID OF NEW YORK INC | |
| Legal Status: | Private |
| Date Became Current: | 19900730 |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | PO BOX 3165 |
| Owner/Operator City,State,Zip: | HARRISBURG, PA 17105 |
| Owner/Operator Telephone: | 717-761-2633 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | 717-972-3989 |
| Owner/Operator Email: | EHS@RITEAID.COM |
| | |
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: NEIL WIESSMAN | |
| Legal Status: | Private |
| Date Became Current: | Not reported |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Date Ended Current: | Not reported |
| Owner/Operator Address: | NOT REQUIRED |
| Owner/Operator City,State,Zip: | NOT REQUIRED, WY 99999 |
| Owner/Operator Telephone: | 212-555-1212 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |
| | |
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: NEIL WIESSMAN | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | NOT REQUIRED |
| Owner/Operator City,State,Zip: | NOT REQUIRED, WY 99999 |
| Owner/Operator Telephone: | 212-555-1212 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20231018 |
| Handler Name: RITE AID #02541 | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | No |
| Electronic Manifest Broker: | No |
| | |
| Receive Date: | 19990708 |
| Handler Name: OLDSMOBILE DEALERSHIP | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |
| | |
| Receive Date: | 20060101 |
| Handler Name: OLDSMOBILE DEALERSHIP | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |

**RITE AID #02541 (Continued)** **1000383443**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20070101
Handler Name: OLDSMOBILE DEALERSHIP
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19900209
Handler Name: OLDSMOBILE DEALERSHIP
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20111104
Handler Name: RITE AID #2541
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20130510
Handler Name: RITE AID #2541
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20151120

**RITE AID #02541 (Continued)** **1000383443**

Handler Name: RITE AID #02541
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: Not reported
Recognized Trader Exporter: Not reported
Spent Lead Acid Battery Importer: Not reported
Spent Lead Acid Battery Exporter: Not reported
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20190417
Handler Name: RITE AID #02541
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 20221205
Handler Name: RITE AID #02541
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Code: 44611
NAICS Description: Pharmacies And Drug Stores

NAICS Code: 446110
NAICS Description: Pharmacies And Drug Stores

NAICS Code: 45611
NAICS Description: Pharmacies And Drug Retailers

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

**RITE AID #02541 (Continued)** **1000383443**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 001861834VES |
| Last Updated Date: | 20220323 |
| Shipped Date: | 20220318 |
| Received Date: | 20220318 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD986888733 |
| Generator Name: | Rite Aid 2541 |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 420 SOUTH BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 420 SOUTH BROADWAY |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | YONKERS |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD980536593 |
| Designated Facility Name: | Not reported |
| Designated Facility Mail Street Number: | 1 |
| Designated Facility Mail Street 1: | 1 EDEN LANE |
| Designated Facility Mail Street 2: | L.L.C. |
| Designated Facility Mail City: | FLANDERS |
| Designated Facility Mail Zip: | 07836 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 1 |
| Designated Facility Location Street 1: | L.L.C. |
| Designated Facility Location Street 2: | 1 EDEN LANE |
| Designated Facility Location City: | FLANDERS |
| Designated Facility Location Zip: | 07836 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Veolia Es Technical Solutions |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

| | |
|---|---|
| Manifest Tracking Number: | 013879043FLE |
| Last Updated Date: | 20201228 |
| Shipped Date: | 20200629 |
| Received Date: | 20200722 |
| Manifest Status: | Corrected |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD986888733 |
| Generator Name: | Rite Aid 2541 |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 420 SOUTH BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Generator Mail Street 1: | 420 South Broadway |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | Yonkers |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | Rite Aid 2541 |
| Designated Facility EPA ID: | ARD069748192 |
| Designated Facility Name: | Clean Harbors El Dorado Llc |
| Designated Facility Mail Street Number: | Not reported |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | 309 American Circle |
| Designated Facility Mail City: | El Dorado |
| Designated Facility Mail Zip: | 71730 |
| Designated Facility Mail State: | AR |
| Designated Facility Location Street Number: | Not reported |
| Designated Facility Location Street 1: | 309 American Circle |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | El Dorado |
| Designated Facility Location Zip: | 71730 |
| Designated Facility Location State: | AR |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

| | |
|---|---|
| Manifest Tracking Number: | 002202429VES |
| Last Updated Date: | 20230605 |
| Shipped Date: | 20230522 |
| Received Date: | 20230522 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD986888733 |
| Generator Name: | Rite Aid 2541 |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 420 SOUTH BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 420 SOUTH BROADWAY |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | YONKERS |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD980536593 |
| Designated Facility Name: | Not reported |
| Designated Facility Mail Street Number: | 1 |
| Designated Facility Mail Street 1: | 1 EDEN LANE |
| Designated Facility Mail Street 2: | L.L.C. |
| Designated Facility Mail City: | FLANDERS |
| Designated Facility Mail Zip: | 07836 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 1 |
| Designated Facility Location Street 1: | L.L.C. |
| Designated Facility Location Street 2: | 1 EDEN LANE |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Designated Facility Location City: | FLANDERS |
| Designated Facility Location Zip: | 07836 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Veolia Es Technical Solutions |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

| | |
|---|---|
| Manifest Tracking Number: | 001868037VES |
| Last Updated Date: | 20210505 |
| Shipped Date: | 20210428 |
| Received Date: | 20210428 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD986888733 |
| Generator Name: | Rite Aid 2541 |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 420 SOUTH BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 420 SOUTH BROADWAY |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | YONKERS |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD980536593 |
| Designated Facility Name: | Not reported |
| Designated Facility Mail Street Number: | 1 |
| Designated Facility Mail Street 1: | 1 EDEN LANE |
| Designated Facility Mail Street 2: | L.L.C. |
| Designated Facility Mail City: | FLANDERS |
| Designated Facility Mail Zip: | 07836 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 1 |
| Designated Facility Location Street 1: | L.L.C. |
| Designated Facility Location Street 2: | 1 EDEN LANE |
| Designated Facility Location City: | FLANDERS |
| Designated Facility Location Zip: | 07836 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Veolia Es Technical Solutions |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

| | |
|---|---|
| Manifest Tracking Number: | 013489812FLE |
| Last Updated Date: | 20190827 |
| Shipped Date: | 20190501 |
| Received Date: | 20190513 |
| Manifest Status: | Corrected |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD986888733 |
| Generator Name: | Rite Aid 2541 |
| Generator Location Street Number: | Not reported |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Generator Location Street 1: | 420 SOUTH BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 420 South Broadway |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | Yonkers |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NCD000648451 |
| Designated Facility Name: | Clean Harbors Reidsville Llc |
| Designated Facility Mail Street Number: | Not reported |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | 208 Watlington Industrial Drive |
| Designated Facility Mail City: | Reidsville |
| Designated Facility Mail Zip: | 27320 |
| Designated Facility Mail State: | NC |
| Designated Facility Location Street Number: | Not reported |
| Designated Facility Location Street 1: | 208 Watlington Industrial Drive |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | Reidsville |
| Designated Facility Location Zip: | 27320 |
| Designated Facility Location State: | NC |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

| | |
|---|---|
| Manifest Tracking Number: | 014177243FLE |
| Last Updated Date: | 20200120 |
| Shipped Date: | 20191213 |
| Received Date: | 20191230 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD986888733 |
| Generator Name: | Rite Aid 2541 |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 420 SOUTH BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 420 South Broadway |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | Yonkers |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | Rite Aid 2541 |
| Designated Facility EPA ID: | NCD000648451 |
| Designated Facility Name: | Clean Harbors Reidsville Llc |
| Designated Facility Mail Street Number: | Not reported |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | 208 Watlington Industrial Drive |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Designated Facility Mail City: | Reidsville |
| Designated Facility Mail Zip: | 27320 |
| Designated Facility Mail State: | NC |
| Designated Facility Location Street Number: | Not reported |
| Designated Facility Location Street 1: | 208 Watlington Industrial Drive |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | Reidsville |
| Designated Facility Location Zip: | 27320 |
| Designated Facility Location State: | NC |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

| | |
|---|---|
| Manifest Tracking Number: | 002012584VES |
| Last Updated Date: | 20220715 |
| Shipped Date: | 20220711 |
| Received Date: | 20220711 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD986888733 |
| Generator Name: | Rite Aid 2541 |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 420 SOUTH BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 420 SOUTH BROADWAY |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | YONKERS |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD980536593 |
| Designated Facility Name: | Not reported |
| Designated Facility Mail Street Number: | 1 |
| Designated Facility Mail Street 1: | 1 EDEN LANE |
| Designated Facility Mail Street 2: | L.L.C. |
| Designated Facility Mail City: | FLANDERS |
| Designated Facility Mail Zip: | 07836 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 1 |
| Designated Facility Location Street 1: | L.L.C. |
| Designated Facility Location Street 2: | 1 EDEN LANE |
| Designated Facility Location City: | FLANDERS |
| Designated Facility Location Zip: | 07836 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Veolia Es Technical Solutions |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

| | |
|---|---|
| Manifest Tracking Number: | 002059887VES |
| Last Updated Date: | 20211118 |
| Shipped Date: | 20211110 |
| Received Date: | 20211110 |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD986888733 |
| Generator Name: | Rite Aid 2541 |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 420 SOUTH BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 420 SOUTH BROADWAY |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | YONKERS |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD980536593 |
| Designated Facility Name: | Not reported |
| Designated Facility Mail Street Number: | 1 |
| Designated Facility Mail Street 1: | 1 EDEN LANE |
| Designated Facility Mail Street 2: | L.L.C. |
| Designated Facility Mail City: | FLANDERS |
| Designated Facility Mail Zip: | 07836 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 1 |
| Designated Facility Location Street 1: | L.L.C. |
| Designated Facility Location Street 2: | 1 EDEN LANE |
| Designated Facility Location City: | FLANDERS |
| Designated Facility Location Zip: | 07836 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Veolia Es Technical Solutions |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

| | |
|---|---|
| Manifest Tracking Number: | 002131833VES |
| Last Updated Date: | 20230929 |
| Shipped Date: | 20230921 |
| Received Date: | 20230921 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD986888733 |
| Generator Name: | Rite Aid 2541 |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 420 SOUTH BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 420 SOUTH BROADWAY |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | YONKERS |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD980536593 |
| Designated Facility Name: | Not reported |
| Designated Facility Mail Street Number: | 1 |
| Designated Facility Mail Street 1: | 1 EDEN LANE |
| Designated Facility Mail Street 2: | L.L.C. |
| Designated Facility Mail City: | FLANDERS |
| Designated Facility Mail Zip: | 07836 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 1 |
| Designated Facility Location Street 1: | L.L.C. |
| Designated Facility Location Street 2: | 1 EDEN LANE |
| Designated Facility Location City: | FLANDERS |
| Designated Facility Location Zip: | 07836 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Veolia Es Technical Solutions |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

| | |
|---|---|
| Manifest Tracking Number: | 014827065FLE |
| Last Updated Date: | 20201112 |
| Shipped Date: | 20200930 |
| Received Date: | 20201021 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD986888733 |
| Generator Name: | Rite Aid 2541 |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 420 SOUTH BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 420 South Broadway |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | Yonkers |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | Rite Aid 2541 |
| Designated Facility EPA ID: | NCD000648451 |
| Designated Facility Name: | Clean Harbors Reidsville Llc |
| Designated Facility Mail Street Number: | Not reported |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | 208 Watlington Industrial Drive |
| Designated Facility Mail City: | Reidsville |
| Designated Facility Mail Zip: | 27320 |
| Designated Facility Mail State: | NC |
| Designated Facility Location Street Number: | Not reported |
| Designated Facility Location Street 1: | 208 Watlington Industrial Drive |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | Reidsville |
| Designated Facility Location Zip: | 27320 |
| Designated Facility Location State: | NC |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |

**RITE AID #02541 (Continued)** **1000383443**

Rejection Indicator: N

Manifest Tracking Number: 001860580VES
Last Updated Date: 20210129
Shipped Date: 20210127
Received Date: 20210127
Manifest Status: Signed
Submission Type: DataImage5Copy
Origin Type: Service
Generator EPA ID: NYD986888733
Generator Name: Rite Aid 2541
Generator Location Street Number: Not reported
Generator Location Street 1: 420 SOUTH BROADWAY
Generator Location Street 2: Not reported
Generator Location City: YONKERS
Generator Location State: NY
Generator Location Zip: 10705
Generator Mail Street Number: Not reported
Generator Mail Street 1: 420 SOUTH BROADWAY
Generator Mail Street 2: Not reported
Generator Mail City: YONKERS
Generator Mail Zip: 10705
Generator Mail State: NY
Generator Contact Company Name: Not reported
Designated Facility EPA ID: NJD980536593
Designated Facility Name: Not reported
Designated Facility Mail Street Number: 1
Designated Facility Mail Street 1: 1 EDEN LANE
Designated Facility Mail Street 2: L.L.C.
Designated Facility Mail City: FLANDERS
Designated Facility Mail Zip: 07836
Designated Facility Mail State: NJ
Designated Facility Location Street Number: 1
Designated Facility Location Street 1: L.L.C.
Designated Facility Location Street 2: 1 EDEN LANE
Designated Facility Location City: FLANDERS
Designated Facility Location Zip: 07836
Designated Facility Location State: NJ
Designated Facility Contact Company Name: Veolia Es Technical Solutions
Manifest Residue Indicator: N
Rejection Indicator: N

Transporter:
Manifest Tracking Number: 002010996VES
Transporter Line Number: 1
Transporter EPA ID: NJD080631369
Transporter Name: Veolia Es Technical Solutions

Waste Line:
Manifest Tracking Number: 002010996VES
Waste Line Number: 1
U.S. DOT Hazardous Indicator: Y
U.S. DOT ID Number: UN3249
U.S. DOT Description: Un3249, Waste Medicine, Solid, Toxic, N.O.S., (Warfarin), 6.1, Ii
Non-Hazardous Waste Description: Not reported
Number of Containers: 1

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Container Type Code: | DF |
| Container Type Description: | Fiberboard or plastic drums, barrels, kegs |
| Waste Quantity: | 1 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.0005 |
| Acute Waste Quantity, in Tons: | 0.0005 |
| Non-Acute Waste Quantity, in Tons: | 0 |
| Waste Quantity, in Kilograms: | 0.45351502 |
| Acute Waste Quantity, in Kilograms: | 0.45351502 |
| Non-Acute Waste Quantity, in Kilorgrams: | 0 |
| Management Method Code: | H141 |
| Management Method Description: | STORAGE, BULKING AND/OR TRANSFER OFF SITE |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | P001 |
| Quantity Haz Kg: | 0.45351502 |
| Quantity Haz Tons: | 0.0005 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-B |
| | |
| Manifest Tracking Number: | 002010996VES |
| Waste Line Number: | 2 |
| U.S. DOT Hazardous Indicator: | Y |
| U.S. DOT ID Number: | UN1851 |
| U.S. DOT Description: | Un1851, Waste Medicine, Liquid, Toxic, N.O.S., (Chlorambucil, Reserpine), 6.1, Ii |
| Non-Hazardous Waste Description: | Not reported |
| Number of Containers: | 1 |
| Container Type Code: | DF |
| Container Type Description: | Fiberboard or plastic drums, barrels, kegs |
| Waste Quantity: | 10 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.005 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.005 |
| Waste Quantity, in Kilograms: | 4.53515 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 4.53515 |
| Management Method Code: | H141 |
| Management Method Description: | STORAGE, BULKING AND/OR TRANSFER OFF SITE |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | D005, D007, D009, D010, D011, D024, U010, U035, U058, U129, U200, U201 |
| Quantity Haz Kg: | 4.53515 |
| Quantity Haz Tons: | 0.005 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-B |

| | |
|---|---|
| Manifest Tracking Number: | 002010996VES |
| Waste Line Number: | 3 |
| U.S. DOT Hazardous Indicator: | Y |
| U.S. DOT ID Number: | UN1791 |
| U.S. DOT Description: | Un1791, Waste Hypochlorite Solutions, (Bleach Solution), 8, Ii |
| Non-Hazardous Waste Description: | Not reported |
| Number of Containers: | 1 |
| Container Type Code: | DF |
| Container Type Description: | Fiberboard or plastic drums, barrels, kegs |
| Waste Quantity: | 1 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.0005 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.0005 |
| Waste Quantity, in Kilograms: | 0.45351502 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 0.45351502 |
| Management Method Code: | H141 |
| Management Method Description: | STORAGE, BULKING AND/OR TRANSFER OFF SITE |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | D002 |
| Quantity Haz Kg: | 0.45351502 |
| Quantity Haz Tons: | 0.0005 |
| Quantity Non Haz Kg: | 0 |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-B |
| | |
| Manifest Tracking Number: | 002010996VES |
| Waste Line Number: | 4 |
| U.S. DOT Hazardous Indicator: | N |
| U.S. DOT ID Number: | Not reported |
| U.S. DOT Description: | Not reported |
| Non-Hazardous Waste Description: | Non-Regulated Material, Non-Rcra, Non-Dot., (Castor Oil, Petroleum Jelly) |
| Number of Containers: | 1 |
| Container Type Code: | DF |
| Container Type Description: | Fiberboard or plastic drums, barrels, kegs |
| Waste Quantity: | 140 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.07 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.07 |
| Waste Quantity, in Kilograms: | 63.492104 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 63.492104 |
| Management Method Code: | H141 |
| Management Method Description: | STORAGE, BULKING AND/OR TRANSFER OFF SITE |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | N |
| Federal Waste Codes: | Not reported |
| Quantity Haz Kg: | 0 |
| Quantity Haz Tons: | 0 |
| Quantity Non Haz Kg: | 63.492104 |
| Quantity Non Haz Tons: | 0.07 |
| State Waste Codes: | NJ-ID27, NY-B |
| | |
| Manifest Tracking Number: | 002010996VES |
| Waste Line Number: | 5 |
| U.S. DOT Hazardous Indicator: | N |
| U.S. DOT ID Number: | Not reported |
| U.S. DOT Description: | Not reported |
| Non-Hazardous Waste Description: | Universal Waste-Consumer Electronic Devices |
| Number of Containers: | 1 |
| Container Type Code: | DF |
| Container Type Description: | Fiberboard or plastic drums, barrels, kegs |
| Waste Quantity: | 1 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Waste Quantity, in Tons: | 0.0005 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.0005 |
| Waste Quantity, in Kilograms: | 0.45351502 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 0.45351502 |
| Management Method Code: | H141 |
| Management Method Description: | STORAGE, BULKING AND/OR TRANSFER OFF SITE |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | N |
| Federal Waste Codes: | Not reported |
| Quantity Haz Kg: | 0 |
| Quantity Haz Tons: | 0 |
| Quantity Non Haz Kg: | 0.45351502 |
| Quantity Non Haz Tons: | 0.0005 |
| State Waste Codes: | NY-R |

| | |
|---|---|
| Manifest Tracking Number: | 002010996VES |
| Waste Line Number: | 6 |
| U.S. DOT Hazardous Indicator: | N |
| U.S. DOT ID Number: | Not reported |
| U.S. DOT Description: | Not reported |
| Non-Hazardous Waste Description: | Batteries, Dry, Sealed, N.O.S. |
| Number of Containers: | 1 |
| Container Type Code: | DF |
| Container Type Description: | Fiberboard or plastic drums, barrels, kegs |
| Waste Quantity: | 1 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.0005 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.0005 |
| Waste Quantity, in Kilograms: | 0.45351502 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 0.45351502 |
| Management Method Code: | H141 |
| Management Method Description: | STORAGE, BULKING AND/OR TRANSFER OFF SITE |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |

**RITE AID #02541 (Continued)** **1000383443**

| | |
|---|---|
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | N |
| Federal Waste Codes: | Not reported |
| Quantity Haz Kg: | 0 |
| Quantity Haz Tons: | 0 |
| Quantity Non Haz Kg: | 0.45351502 |
| Quantity Non Haz Tons: | 0.0005 |
| State Waste Codes: | NJ-ID27, NY-R |

Click this hyperlink while viewing on your computer to access
8 additional US EManifest: record(s) in the EDR Site Report.

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**Y189** **CONSOLIDATED EDISON ELECTRIC** **E MANIFEST** **1031976744**
**East** **390 S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.214 mi.**
**1128 ft.** **Site 6 of 23 in cluster Y**

**Relative:**
**Higher**

**Actual:**
**77 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 017447637FLE |
| Last Updated Date: | 20221121 |
| Shipped Date: | 20221109 |
| Received Date: | 20221110 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Consolidated Edison Electric |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 390 S BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10701 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 116 SKYLINE DRIVE |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | SOUTH PLAINFIELD |
| Generator Mail Zip: | 07080 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | KEARNY |
| Designated Facility Location Zip: | 07032 |

**CONSOLIDATED EDISON ELECTRIC (Continued)** **1031976744**

Designated Facility Location State: NJ
Designated Facility Contact Company Name: Not reported
Manifest Residue Indicator: N
Rejection Indicator: N

Transporter:
Manifest Tracking Number: 017447637FLE
Transporter Line Number: 1
Transporter EPA ID: MAD039322250
Transporter Name: Clean Harbors Environmental Services Inc

Waste Line:
Manifest Tracking Number: 017447637FLE
Waste Line Number: 1
U.S. DOT Hazardous Indicator: Y
U.S. DOT ID Number: NA3082
U.S. DOT Description: Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq
Non-Hazardous Waste Description: Not reported
Number of Containers: 1
Container Type Code: TT
Container Type Description: Cargo tanks (tank trucks)
Waste Quantity: 1000
Quantity Unit of Measure Code: P
Quantity Unit of Measure Description: Pounds
Waste Quantity, in Tons: 0.5
Acute Waste Quantity, in Tons: 0
Non-Acute Waste Quantity, in Tons: 0.5
Waste Quantity, in Kilograms: 453.515
Acute Waste Quantity, in Kilograms: 0
Non-Acute Waste Quantity, in Kilorgrams: 453.515
Management Method Code: H110
Management Method Description: STABILIZATION
Waste Residue Indicator: N
Quantity Discrepancy Indicator: N
Waste Type Discrepancy Indicator: N
Waste Density: Not reported
Waste Density Unit of Measure Code: Not reported
Waste Density Unit of Measure Description: Not reported
Form Code: Not reported
Form Code Description: Not reported
Source Code: Not reported
Source Code Description: Not reported
Waste Minimization Code: Not reported
Waste Minimization Code Description: Not reported
Consent Number: Not reported
EPA Waste Indicator: Y
Federal Waste Codes: D008
Quantity Haz Kg: 453.515
Quantity Haz Tons: 0.5
Quantity Non Haz Kg: 0
Quantity Non Haz Tons: 0
State Waste Codes: NY-T

**AC190** **CON EDISON** **NY MANIFEST** **S119078071**
**SSE** **26 SAINT ANDREWS PL** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.214 mi.**
**1131 ft.** **Site 7 of 12 in cluster AC**

**Relative:**
**Higher**

**Actual:**
**87 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004845406 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 26 SAINT ANDREWS PL |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | 26 ST ANDREWS PL |
| Location Address 2: | SB 1234 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Dennis Huacon |
| Mailing Address 1: | 4 IRVING PL 15TH FL |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 09/29/2015 |
| Trans1 Recv Date: | 09/29/2015 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 10/05/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004845406 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 014460336JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CON EDISON (Continued)** **S119078071**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 25 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**AC191** **CON EDISON** **NJ MANIFEST** **S120677305**
**SSE** **26 SAINT ANDREWS PL** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.214 mi.**
**1131 ft.** **Site 8 of 12 in cluster AC**

**Relative:** **Higher**

**Actual:** **87 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004845406 |
| Name: | CON EDISON |
| Address: | 26 SAINT ANDREWS PL |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004845406 |
| Manifest Number: | 014460336JJK |
| Date Shipped: | 9/29/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |

**CON EDISON (Continued)** **S120677305**

| | |
|---|---|
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

---

**AC192** **CON EDISON** **RCRA NonGen / NLR** **1019908398**
**SSE** **26 SAINT ANDREWS PL** **NYP004845406**
**1/8-1/4** **YONKERS, NY 10705**
**0.214 mi.**
**1131 ft.** **Site 9 of 12 in cluster AC**

**Relative:** **Higher**

**Actual:** **87 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20150929 |
| Handler Name: | Con Edison |
| Handler Address: | Saint Andrews Pl |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYP004845406 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |

**CON EDISON (Continued)** **1019908398**

| | | |
|---|---|---|
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20160909 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Historic Generators:

| | | |
|---|---|---|
| Receive Date: | | 20150929 |
| Handler Name: | CON EDISON | |
| Federal Waste Generator Description: | | Small Quantity Generator |

**CON EDISON (Continued)** **1019908398**

| | |
|---|---|
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |
| Receive Date: | 20150929 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

---

**Y193** **CON EDISON** **NJ MANIFEST** **S120670974**
**ENE** **MCCLEAN AVE & BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.214 mi.**
**1132 ft.** **Site 7 of 23 in cluster Y**

**Relative:** **Higher**
**Actual:** **81 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004773602 |
| Name: | CON EDISON |
| Address: | MCCLEAN AVE & BROADWAY |
| City,State,Zip: | YONKERS, NY 10701 |
| County: | Not reported |
| Mailing Address: | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |

**CON EDISON (Continued)** **S120670974**

| | |
|---|---|
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004773602 |
| Manifest Number: | 014091754JJK |
| Date Shipped: | 4/23/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

---

**Y194** **CON EDISON SERVICE BOX: 496** **RCRA NonGen / NLR** **1016967517**
**ENE** **S BROADWAY & MCLEAN AVE** **NY MANIFEST** **NYP004411211**
**1/8-1/4** **YONKERS, NY 10710**
**0.214 mi.**
**1132 ft.** **Site 8 of 23 in cluster Y**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20140127 |
| Handler Name: | Con Edison Service Box: 496 |
| Handler Address: | S Broadway & Mclean Ave |

**CON EDISON SERVICE BOX: 496 (Continued)** **1016967517**

| | | |
|---|---|---|
| Handler City,State,Zip: | | YONKERS, NY 10710 |
| EPA ID: | | NYP004411211 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20140701 |

**CON EDISON SERVICE BOX: 496 (Continued)** **1016967517**

| | |
|---|---|
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20131227 |
| Handler Name: CON EDISON SERVICE BOX: | 496 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140127 |
| Handler Name: CON EDISON SERVICE BOX: | 496 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004411211 |
| Country: | USA |
| Name: | Con Edison |
| Address: | S BROADWAY & MCLEAN AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10710 |
| Zip 4: | Not reported |

**CON EDISON SERVICE BOX: 496 (Continued)** **1016967517**

Location Address 1: S BROADWAY & MCCLEAN
Location Address 2: SB496
Location City,State,Zip: YONKERS, NY 10705
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Con Edison
Mailing Address 1: 4 IRVING PLACE
Mailing Address 2: 15TH FL
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: Not reported

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 12/27/2013
Trans1 Recv Date: 12/27/2013
Trans2 Recv Date: Not reported
TSD Site Recv Date: 12/31/2013
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004411211
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 011695206JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported

**CON EDISON SERVICE BOX: 496 (Continued)** **1016967517**

| | |
|---|---|
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 10 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**Y195** **CON EDISON** **RCRA NonGen / NLR** **1019902425**
**ENE** **MCCLEAN AVE & BROADWAY** **FINDS** **NYP004773602**
**1/8-1/4** **YONKERS, NY 10701** **ECHO**
**0.214 mi.**
**1132 ft.** **Site 9 of 23 in cluster Y**

**Relative:** **Higher**

**Actual:** **81 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20150423 |
| Handler Name: | | Con Edison |
| Handler Address: | | Mcclean Ave & Broadway |
| Handler City,State,Zip: | | YONKERS, NY 10701 |
| EPA ID: | | NYP004773602 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |

**CON EDISON (Continued)** **1019902425**

| | |
|---|---|
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160909 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20150423 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20150423 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

**CON EDISON (Continued)** **1019902425**

NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110069684782

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1019902425
Registry ID: 110069684782

DFR URL:
Name: CON EDISON
Address: Mcclean Ave & Broadway
City,State,Zip: YONKERS, NY 10701

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**Y196** **CON EDISON** **NY MANIFEST** **S116550454**
**ENE** **S BROADWAY & MCLEAN AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10710**
**0.214 mi.**
**1132 ft.** **Site 10 of 23 in cluster Y**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

NY MANIFEST:
EPA ID: NYP004488375
Country: USA
Name: Con Edison
Address: S BROADWAY & MCLEAN AVE
Address 2: Not reported
City,State,Zip: YONKERS, NY 10710
Zip 4: Not reported
Location Address 1: S BROADWAY 30 MCLEAN AVE
Location Address 2: SB439
Location City,State,Zip: YONKERS, NY 10801
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Con Edison
Mailing Address 1: 4 IRVING PL
Mailing Address 2: 15TH FL
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA

**CON EDISON (Continued)** **S116550454**

Mailing Phone: Not reported

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 04/03/2014 |
| Trans1 Recv Date: | 04/03/2014 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 04/08/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004488375 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 012354038JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 25 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

**Y197** **CON EDISON** **NY MANIFEST** **S117059138**
**ENE** **S BROADWAY & MCCLEAN AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.214 mi.**
**1132 ft.** **Site 11 of 23 in cluster Y**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004512877 |
| Country: | USA |
| Name: | Con Edison |
| Address: | S BROADWAY & MCCLEAN AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10701 |
| Zip 4: | Not reported |
| Location Address 1: | C/O S. BROADWAY & MCLEAN |
| Location Address 2: | SERVICE BOX # 440 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Tom Telling |
| Mailing Address 1: | 4 IRVING PLACE-15TH FLOOR |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 04/25/2014 |
| Trans1 Recv Date: | 04/25/2014 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 04/29/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004512877 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 012770998JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CON EDISON (Continued)** **S117059138**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 50 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**Y198** **CON EDISON VAULT: 6326** **RCRA NonGen / NLR** **1016964826**
**ENE** **MCLEAN AVE & S BROADWAY** **NY MANIFEST** **NYP004377321**
**1/8-1/4** **YONKERS, NY 10703**
**0.214 mi.**
**1132 ft.** **Site 12 of 23 in cluster Y**

**Relative:** **Higher**

**Actual:** **81 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20131121 |
| Handler Name: | Con Edison Vault: 6326 |
| Handler Address: | Mclean Ave & S Broadway |
| Handler City,State,Zip: | YONKERS, NY 10703 |
| EPA ID: | NYP004377321 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | SENIOR SCIENTIST |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |
| State District: | NYSDEC R2 |
| Mailing Address: | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Owner Name: | Not reported |
| Owner Type: | Not reported |
| Operator Name: | Not reported |
| Operator Type: | Not reported |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |

**CON EDISON VAULT: 6326 (Continued)** **1016964826**

| | |
|---|---|
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20140701 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20131021 |
| Handler Name: CON EDISON VAULT: 6326 | |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20131121 |
| Handler Name: CON EDISON VAULT: 6326 | |

**CON EDISON VAULT: 6326 (Continued)** **1016964826**

| | |
|---|---|
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004377321 |
| Country: | USA |
| Name: | Con Edison |
| Address: | MCLEAN AVE & S BROADWAY |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10703 |
| Zip 4: | Not reported |
| Location Address 1: | MCLEAN AVE & S BROADWAY |
| Location Address 2: | SB6326 |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PLACE |
| Mailing Address 2: | 15TH FL |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 10/21/2013 |
| Trans1 Recv Date: | 10/21/2013 |

**CON EDISON VAULT: 6326 (Continued)** **1016964826**

| | |
|---|---|
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 10/29/2013 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004377321 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 011693702JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 200 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**Y199** **CON EDISON** **RCRA NonGen / NLR** **1014396059**
**ENE** **S BROADWAY & MCLEAN AVE** **NY MANIFEST** **NYP004182390**
**1/8-1/4** **YONKERS, NY 10703**
**0.214 mi.**
**1132 ft.** **Site 13 of 23 in cluster Y**

**Relative:** **Higher**
**Actual:** **81 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20160601 |
| Handler Name: | Con Edison |
| Handler Address: | S Broadway & Mclean Ave |
| Handler City,State,Zip: | YONKERS, NY 10703 |
| EPA ID: | NYP004182390 |
| Contact Name: | NEIL SKOW |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 718-204-4249 |
| Contact Fax: | Not reported |

**CON EDISON (Continued)** **1014396059**

| | | |
|---|---|---|
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R3 |
| Mailing Address: | | 4 IRVING PL, RM 828 |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20161107 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

**CON EDISON (Continued)** **1014396059**

Historic Generators:

| | |
|---|---|
| Receive Date: | 20090626 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20160601 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004182390 |
| Country: | USA |
| Name: | Consolidated Edison - Mh 441 |
| Address: | S BROADWAY & MCLEAN AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10703 |
| Zip 4: | Not reported |
| Location Address 1: | SOUTH BROADWAY & MC LEAN AVE |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

**CON EDISON (Continued)** **1014396059**

Mailing Name: Consolidated Edison - Mh 441
Mailing Contact: Franklyn Murray
Mailing Address 1: 4 IRVING PLACE RM 828
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124602808

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 06/26/2009
Trans1 Recv Date: 06/26/2009
Trans2 Recv Date: Not reported
TSD Site Recv Date: 06/29/2009
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004182390
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NYD077444263
TSDF ID 2: Not reported
Manifest Tracking Number: 001440633FLE
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H141
Waste Code a: Lead
Waste Code b: B002
Waste Code c: B007
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 100
Units: Kilograms
Number of Containers: 1
Container Type: Metal drums, barrels, kegs
Handling Method: Burn
Specific Gravity: 1

**Y200** **CON EDISON SERVICE BOX: 440** **RCRA NonGen / NLR** **1016967632**
**ENE** **MCCLEAN AVE & S BROADWAY** **NY MANIFEST** **NYP004412292**
**1/8-1/4** **YONKERS, NY 10710**
**0.214 mi.**
**1132 ft.** **Site 14 of 23 in cluster Y**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20140204 |
| Handler Name: | | Con Edison Service Box: 440 |
| Handler Address: | | Mcclean Ave & S Broadway |
| Handler City,State,Zip: | | YONKERS, NY 10710 |
| EPA ID: | | NYP004412292 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |

**CON EDISON SERVICE BOX: 440 (Continued)** **1016967632**

| | |
|---|---|
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20141014 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20140104 |
| Handler Name: CON EDISON SERVICE BOX: | 440 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140204 |
| Handler Name: CON EDISON SERVICE BOX: | 440 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

**CON EDISON SERVICE BOX: 440 (Continued)** **1016967632**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004412292 |
| Country: | USA |
| Name: | Con Edison |
| Address: | MCCLEAN AVE & S BROADWAY |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10710 |
| Zip 4: | Not reported |
| Location Address 1: | SOUTH BROADWAY & MCLEAN AVE |
| Location Address 2: | SB 440 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Tom Teeling |
| Mailing Address 1: | 4 IRVING PLACE - 15TH FLOOR |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/04/2014 |
| Trans1 Recv Date: | 01/04/2014 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 01/06/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004412292 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 011696142JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |

**CON EDISON SERVICE BOX: 440 (Continued)** **1016967632**

| | |
|---|---|
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 150 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**Y201** **CON EDISON** **NY MANIFEST** **S119074769**
**ENE** **MCCLEAN AVE & BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.214 mi.**
**1132 ft.** **Site 15 of 23 in cluster Y**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004773602 |
| Country: | USA |
| Name: | Con Edison |
| Address: | MCCLEAN AVE & BROADWAY |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10701 |
| Zip 4: | Not reported |
| Location Address 1: | MCLEAN AVE & BROADWAY |
| Location Address 2: | MH 441 |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Tom Teeling |
| Mailing Address 1: | 4 IRVING PLACE - 15TH FLOOR |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 04/23/2015 |
| Trans1 Recv Date: | 04/23/2015 |

**CON EDISON (Continued)** **S119074769**

| | |
|---|---|
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 04/28/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004773602 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 014091754JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 200 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**Y202** **CON EDISON** **NY MANIFEST** **S117319025**
**ENE** **MCLEANE AVE & S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.214 mi.**
**1132 ft.** **Site 16 of 23 in cluster Y**

**Relative:** NY MANIFEST:
**Higher**

| | |
|---|---|
| EPA ID: | NYP004666558 |
| Country: | USA |
| Name: | Con Edison |
| Address: | MCLEANE AVE & S BROADWAY |
| Address 2: | MH 441 |
| City,State,Zip: | YONKERS, NY |
| Zip 4: | Not reported |
| Location Address 1: | MCLEANE AVE & S BROADWAY |
| Location Address 2: | MH 441 |
| Location City,State,Zip: | YONKERS, NY |

**Actual:**
**81 ft.**

**CON EDISON (Continued)** **S117319025**

Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Con Edison
Mailing Address 1: 4 IRVING PL 15TH FL
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 09/25/2014
Trans1 Recv Date: 09/25/2014
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/30/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004666558
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 012770948JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 25

**CON EDISON (Continued)** **S117319025**

| | |
|---|---|
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**Y203** **CON EDISON SERVICE BOX: 440** **RCRA NonGen / NLR** **1017773503**
**ENE** **S BROADWAY & MCCLEAN AVE** **FINDS** **NYP004512877**
**1/8-1/4** **YONKERS, NY 10701**
**0.214 mi.**
**1132 ft.** **Site 17 of 23 in cluster Y**

**Relative:** **Higher**

**Actual:** **81 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20140525 |
| Handler Name: | | Con Edison Service Box: 440 |
| Handler Address: | | S Broadway & Mcclean Ave |
| Handler City,State,Zip: | | YONKERS, NY 10701 |
| EPA ID: | | NYP004512877 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |

**CON EDISON SERVICE BOX: 440 (Continued)** **1017773503**

| | |
|---|---|
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150211 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20140425 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Large Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140425 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140525 |
| Handler Name: CON EDISON SERVICE BOX: 440 | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |

**CON EDISON SERVICE BOX: 440 (Continued)** **1017773503**

Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110063778194

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

---

**Y204** **CON EDISON** **RCRA NonGen / NLR** **1014398508**
**ENE** **S BROADWAY & MCLEAN AVE SE COR** **NY MANIFEST** **NYP004208621**
**1/8-1/4** **YONKERS, NY 10701** **NJ MANIFEST**
**0.214 mi.**
**1132 ft.** **Site 18 of 23 in cluster Y**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

RCRA Listings:
Date Form Received by Agency: 20200413
Handler Name: Con Edison
Handler Address: S Broadway & Mclean Ave Se Cor
Handler City,State,Zip: YONKERS, NY 10701
EPA ID: NYP004208621
Contact Name: Not reported
Contact Address: Not reported
Contact City,State,Zip: Not reported
Contact Telephone: Not reported
Contact Fax: Not reported
Contact Email: Not reported
Contact Title: Not reported
EPA Region: 02
Land Type: Private
Federal Waste Generator Description: Not a generator, verified
Non-Notifier: Not reported
Biennial Report Cycle: Not reported
Accessibility: Not reported
Active Site Indicator: Not reported
State District Owner: Ny
State District: NYSDEC R2
Mailing Address: Not reported

**CON EDISON (Continued)** **1014398508**

| | | |
|---|---|---|
| Mailing City,State,Zip: | | Not reported |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20200413 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Historic Generators:

| | | |
|---|---|---|
| Receive Date: | | 20100614 |
| Handler Name: | CON EDISON | |
| Federal Waste Generator Description: | | Not a generator, verified |
| State District Owner: | | Ny |
| Large Quantity Handler of Universal Waste: | | No |
| Recognized Trader Importer: | | No |
| Recognized Trader Exporter: | | No |
| Spent Lead Acid Battery Importer: | | No |
| Spent Lead Acid Battery Exporter: | | No |

**CON EDISON (Continued)** **1014398508**

Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20200413
Handler Name: CON EDISON
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:
EPA ID: NYP004208621
Country: USA
Name: Consolidated Edison
Address: S BROADWAY & MCLEAN AVE SE COR
Address 2: Not reported
City,State,Zip: YONKERS, NY 10701
Zip 4: Not reported
Location Address 1: SEC SOUTH BROADWAY & MCLEAN AV
Location Address 2: E
Location City,State,Zip: YONKERS, NY 10701
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Consolidated Edison
Mailing Contact: Thomas Teeling
Mailing Address 1: 4 IRVING PL RM 828
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported

**CON EDISON (Continued)** **1014398508**

| | |
|---|---|
| Manifest Status: | Not reported |
| Trans1 State ID: | NJ0000027193 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/14/2010 |
| Trans1 Recv Date: | 06/14/2010 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/14/2010 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004208621 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 001085593GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 10000 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJ0000027193 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/16/2010 |
| Trans1 Recv Date: | 06/16/2010 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 06/16/2010 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |

**CON EDISON (Continued)** **1014398508**

Generator EPA ID: NYP004208621
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 003533385JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H111
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 13000
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

NJ MANIFEST:
EPA ID: NYP004208621
Name: CON EDISON
Address: S BROADWAY & MCLEAN AVE SE COR
City,State,Zip: YONKERS, NY 10701
County: Not reported
Mailing Address: 4 IRVING PL, RM 828
Mailing City,State,Zip: NEW YORK, NY 10003
Telephone: Not reported
Emergency Telephone: Not reported
Contact: ANTHONY BUDA
Comments: Not reported
SIC Code: Not reported
County: NY119
Municipal: Not reported
Previous EPAID: Not reported
Generator Flag: Not reported
Transporter Flag: Not reported
TSDF Flag: Not reported
Name Change: Not reported

**CON EDISON (Continued)** **1014398508**

Date Change: Not reported

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004208621 |
| Manifest Number: | 001085593GBF |
| Date Shipped: | 06/14/2010 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NJ0000027193 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 06/14/2010 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 06/14/2010 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 10000 |
| Unit: | P |

| | |
|---|---|
| EPA ID: | NYP004208621 |
| Manifest Number: | 003533385JJK |
| Date Shipped: | 06/16/2010 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NJ0000027193 |
| Transporter 2 EPA ID: | Not reported |

**CON EDISON (Continued)** **1014398508**

| | |
|---|---|
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 06/16/2010 |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 06/16/2010 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 13000 |
| Unit: | P |

---

**Y205** **CON EDISON SERVICE BOX: 439** **RCRA NonGen / NLR** **1017771740**
**ENE** **BROADWAY & MCLEAN AVE** **NYP004486841**
**1/8-1/4** **YONKERS, NY 10702**
**0.214 mi.**
**1132 ft.** **Site 19 of 23 in cluster Y**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20140502 |
| Handler Name: | Con Edison Service Box: 439 |
| Handler Address: | Broadway & Mclean Ave |
| Handler City,State,Zip: | YONKERS, NY 10702 |
| EPA ID: | NYP004486841 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |

**CON EDISON SERVICE BOX: 439 (Continued)** **1017771740**

| | | |
|---|---|---|
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20150211 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |

**CON EDISON SERVICE BOX: 439 (Continued)** **1017771740**

Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Historic Generators:
Receive Date: 20140402
Handler Name: CON EDISON
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20140402
Handler Name: CON EDISON
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20140502
Handler Name: CON EDISON SERVICE BOX: 439
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

**Y206** **CONSOLIDATED EDISON** **NY MANIFEST** **1009239516**
**ENE** **S BROADWAY & MCLEAN AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.214 mi.**
**1132 ft.** **Site 20 of 23 in cluster Y**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004062303 |
| Country: | USA |
| Name: | Consolidated Edison |
| Address: | S BROADWAY & MCLEAN AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | S BROADWAY & MCLEAN AVE |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Consolidated Edison |
| Mailing Contact: | Franklin Murray |
| Mailing Address 1: | 4 IRVING PLACE RM 828 |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124602808 |

Manifest Data:

| | |
|---|---|
| Document ID: | NYE0259716 |
| Manifest Status: | Not reported |
| Trans1 State ID: | 28190AU |
| Year: | 2000 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 09/14/2000 |
| Trans1 Recv Date: | 09/14/2000 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 09/14/2000 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004062303 |
| Trans1 EPA ID: | NYD006982359 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD077444263 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CONSOLIDATED EDISON (Continued)** **1009239516**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | B007 |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00050 |
| Units: | Kilograms |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Landfill |
| Specific Gravity: | 01.00 |

---

**Y207** **CON EDISON** **NY MANIFEST** **S116550323**
**ENE** **BROADWAY & MCLEAN AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10702**
**0.214 mi.**
**1132 ft.** **Site 21 of 23 in cluster Y**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004486841 |
| Country: | USA |
| Name: | Con Edison |
| Address: | BROADWAY & MCLEAN AVE |
| Address 2: | 360 FEET S OF |
| City,State,Zip: | YONKERS, NY 10702 |
| Zip 4: | Not reported |
| Location Address 1: | F/O 360 S BROADWAY |
| Location Address 2: | SB439 |
| Location City,State,Zip: | YONKERS, NY 10801 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PL |
| Mailing Address 2: | 15TH FL |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 04/02/2014 |
| Trans1 Recv Date: | 04/02/2014 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 04/08/2014 |

**CON EDISON (Continued)** **S116550323**

| | |
|---|---|
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004486841 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 012354046JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 20 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**Y208** **CON EDISON SERVICE BOX: 440** **NJ MANIFEST** **S120666051**
**ENE** **MCCLEAN AVE & S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10710**
**0.214 mi.**
**1132 ft.** **Site 22 of 23 in cluster Y**

**Relative:** **Higher**
**Actual:** **81 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004412292 |
| Name: | CON EDISON SERVICE BOX: 440 |
| Address: | MCCLEAN AVE & S BROADWAY |
| City,State,Zip: | YONKERS, NY 10710 |
| County: | Not reported |
| Mailing Address: | VING PL, 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |

**CON EDISON SERVICE BOX: 440 (Continued)** **S120666051**

| | |
|---|---|
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004412292 |
| Manifest Number: | 015320837JJK |
| Date Shipped: | 12/24/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NJ0000027193 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

**Y209** **CON EDISON SERVICE BOX: 439** **RCRA NonGen / NLR** **1017771891**
**ENE** **S BROADWAY & MCLEAN AVE** **NYP004488375**
**1/8-1/4** **YONKERS, NY 10710**
**0.214 mi.**
**1132 ft.** **Site 23 of 23 in cluster Y**

**Relative:** **Higher**

**Actual:** **81 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20140503 |
| Handler Name: | | Con Edison Service Box: 439 |
| Handler Address: | | S Broadway & Mclean Ave |
| Handler City,State,Zip: | | YONKERS, NY 10710 |
| EPA ID: | | NYP004488375 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |

**CON EDISON SERVICE BOX: 439 (Continued)** **1017771891**

| | |
|---|---|
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150211 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20140403 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Large Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140403 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140503 |
| Handler Name: CON EDISON SERVICE BOX: 439 | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

**CON EDISON SERVICE BOX: 439 (Continued)** **1017771891**

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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**Z210** **J.R. PROPERTIES OF YONKERS, INC.** **NY AST** **A100355534**
**NNW** **271-273 HAWTHORNE AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.215 mi.**
**1137 ft.** **Site 2 of 4 in cluster Z**

**Relative:**
**Lower**

**Actual:**
**40 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | J.R. PROPERTIES OF YONKERS, INC. |
| Address: | 271-273 HAWTHORNE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-600881 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Rebecca Marchetti |
| Owner Name: | J.R. Properties, Inc. |
| Owner Street: | P.O. Box 998 |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Bronxville, NY 10708 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 07/01/1980 |
| Capacity: | 4000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 2. Aboveground (contact w/ impervious barrier) |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 5. Jacketed |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 2. Vault (w/ access) |
| Piping Location: | 3. Aboveground/Underground Combination |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 1. Diking (aboveground only) |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only),5. Vent Whistle |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 2. Suction |

**AE211** **CON EDISON SERVICE BOX: 686** **RCRA NonGen / NLR** **1016960437**
**South** **185 VALENTINE LN & GRAY PL** **NY MANIFEST** **NYP004324075**
**1/8-1/4** **YONKERS, NY 10705**
**0.216 mi.**
**1139 ft.** **Site 5 of 7 in cluster AE**

**Relative:** **Higher**

**Actual:** **109 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20130802 |
| Handler Name: | | Con Edison Service Box: 686 |
| Handler Address: | | Valentine Ln & Gray Pl |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYP004324075 |
| Contact Name: | | CHRISTOPHER BLAICH |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 914-925-6219 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SR SPECIALIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, RM 828 |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |

**CON EDISON SERVICE BOX: 686 (Continued)** **1016960437**

| | |
|---|---|
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20140701 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20130702 |
| Handler Name: CON EDISON SERVICE BOX: | 686 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20130802 |
| Handler Name: CON EDISON SERVICE BOX: | 686 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

**CON EDISON SERVICE BOX: 686 (Continued)** **1016960437**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004324075 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 185 VALENTINE LN & GRAY PL |
| Address 2: | FRONT OF |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | OPP 185 VALENTINE LANE |
| Location Address 2: | SB #686 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PLACE 15TH FLOOR |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJD003812047 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/02/2013 |
| Trans1 Recv Date: | 07/02/2013 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/03/2013 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004324075 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD991291105 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 002085098GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |

**CON EDISON SERVICE BOX: 686 (Continued)** **1016960437**

| | |
|---|---|
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 150 |
| Units: | Gallons (liquids only) |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**W212** **359 S BROADWAY CLEANERS** **RCRA-VSQG** **1000351726**
**ENE** **359 S BROADWAY** **US AIRS** **NYD982531568**
**1/8-1/4** **YONKERS, NY 10705** **E MANIFEST**
**0.217 mi.** **NY MANIFEST**
**1147 ft.** **Site 4 of 6 in cluster W** **RI MANIFEST**

**Relative:** **Higher**
**Actual:** **81 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20070101 |
| Handler Name: | 359 S Broadway Cleaners |
| Handler Address: | S Broadway |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYD982531568 |
| Contact Name: | SEONG JUNG KIM |
| Contact Address: | S BROADWAY |
| Contact City,State,Zip: | YONKERS, NY 10705 |
| Contact Telephone: | 914-476-8579 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Conditionally Exempt Small Quantity Generator |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Handler Activities |
| State District Owner: | Ny |
| State District: | NYSDEC R3 |
| Mailing Address: | S BROADWAY |
| Mailing City,State,Zip: | YONKERS, NY 10705 |
| Owner Name: Seong Jung Kim | |
| Owner Type: | Private |
| Operator Name: Seong Jung Kim | |
| Operator Type: | Private |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150414 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Hazardous Waste Summary:

| | |
|---|---|
| Waste Code: | D000 |
| Waste Description: | Not Defined |
| Waste Code: | F002 |
| Waste Description: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: SEONG JUNG KIM | |
| Legal Status: | Private |
| Date Became Current: | Not reported |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

Date Ended Current: Not reported
Owner/Operator Address: 359 S BROADWAY
Owner/Operator City,State,Zip: YONKERS, NY 10705
Owner/Operator Telephone: 914-476-8579
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: SEONG JUNG KIM
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 359 S BROADWAY
Owner/Operator City,State,Zip: YONKERS, NY 10705
Owner/Operator Telephone: 914-476-8579
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: SEONG JUNG KIM
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 359 S BROADWAY
Owner/Operator City,State,Zip: YONKERS, NY 10705
Owner/Operator Telephone: 914-476-8579
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20060101
Handler Name: 359 S BROADWAY CLEANERS
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20070101
Handler Name: 359 S BROADWAY CLEANERS
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19911028
Handler Name: 359 S BROADWAY CLEANERS
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Has the Facility Received Notices of Violations:
Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number:Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:
Evaluation Date: 20091210
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION
Evaluation Responsible Person Identifier: NYMOC
Evaluation Responsible Sub-Organization: R3
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

US AIRS MINOR:
Envid: 1000351726
Region Code: 02
Programmatic ID: AIR NY0000003551800714
Facility Registry ID: 110013338414
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

E MANIFEST:
Manifest Tracking Number: 007243092SKS
Last Updated Date: 20200318
Shipped Date: 20200211
Received Date: 20200225
Manifest Status: Signed
Submission Type: DataImage5Copy
Origin Type: Service
Generator EPA ID: NYD982531568
Generator Name: 359 S Broadway Clnrs
Generator Location Street Number: Not reported
Generator Location Street 1: 359 S BROADWAY
Generator Location Street 2: Not reported
Generator Location City: YONKERS
Generator Location State: NY
Generator Location Zip: 10705
Generator Mail Street Number: Not reported
Generator Mail Street 1: 359 S Broadway
Generator Mail Street 2: Not reported
Generator Mail City: Yonkers
Generator Mail Zip: 10705
Generator Mail State: NY
Generator Contact Company Name: 359 S Broadway Clnrs
Designated Facility EPA ID: OHD980587364

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Designated Facility Name: | Clean Harbors Recycling Services Of Ohio, Llc |
| Designated Facility Mail Street Number: | Not reported |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | 581 Milliken Drive SE |
| Designated Facility Mail City: | Hebron |
| Designated Facility Mail Zip: | 43025 |
| Designated Facility Mail State: | OH |
| Designated Facility Location Street Number: | Not reported |
| Designated Facility Location Street 1: | 581 Milliken Drive SE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | Hebron |
| Designated Facility Location Zip: | 43025 |
| Designated Facility Location State: | OH |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

| | |
|---|---|
| Manifest Tracking Number: | 008068748SKS |
| Last Updated Date: | 20220613 |
| Shipped Date: | 20220513 |
| Received Date: | 20220524 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD982531568 |
| Generator Name: | 359 S Broadway Clnrs |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 359 S BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 359 S Broadway |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | Yonkers |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | 359 S Broadway Clnrs |
| Designated Facility EPA ID: | OHD980587364 |
| Designated Facility Name: | Clean Harbors Recycling Services Of Ohio, Llc |
| Designated Facility Mail Street Number: | Not reported |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | 581 Milliken Drive SE |
| Designated Facility Mail City: | Hebron |
| Designated Facility Mail Zip: | 43025 |
| Designated Facility Mail State: | OH |
| Designated Facility Location Street Number: | Not reported |
| Designated Facility Location Street 1: | 581 Milliken Drive SE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | Hebron |
| Designated Facility Location Zip: | 43025 |
| Designated Facility Location State: | OH |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Manifest Tracking Number: | 008068951SKS |
| Last Updated Date: | 20231103 |
| Shipped Date: | 20230929 |
| Received Date: | 20231013 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD982531568 |
| Generator Name: | 359 S Broadway Clnrs |
| Generator Location Street Number: | 359 |
| Generator Location Street 1: | 359 S BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | 359 |
| Generator Mail Street 1: | S Broadway |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | Yonkers |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | 359 S Broadway Clnrs |
| Designated Facility EPA ID: | OHD980587364 |
| Designated Facility Name: | Clean Harbors Recycling Services Of Ohio, Llc |
| Designated Facility Mail Street Number: | Not reported |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | 581 Milliken Drive SE |
| Designated Facility Mail City: | Hebron |
| Designated Facility Mail Zip: | 43025 |
| Designated Facility Mail State: | OH |
| Designated Facility Location Street Number: | Not reported |
| Designated Facility Location Street 1: | 581 Milliken Drive SE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | Hebron |
| Designated Facility Location Zip: | 43025 |
| Designated Facility Location State: | OH |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

| | |
|---|---|
| Manifest Tracking Number: | 006883758SKS |
| Last Updated Date: | 20190827 |
| Shipped Date: | 20190111 |
| Received Date: | 20190129 |
| Manifest Status: | Corrected |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYD982531568 |
| Generator Name: | 359 S Broadway Clnrs |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 359 S BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 359 S Broadway |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | Yonkers |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | OHD980587364 |
| Designated Facility Name: | Clean Harbors Recycling Services Of Ohio, Llc |
| Designated Facility Mail Street Number: | Not reported |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | 581 Milliken Drive SE |
| Designated Facility Mail City: | Hebron |
| Designated Facility Mail Zip: | 43025 |
| Designated Facility Mail State: | OH |
| Designated Facility Location Street Number: | Not reported |
| Designated Facility Location Street 1: | 581 Milliken Drive SE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | Hebron |
| Designated Facility Location Zip: | 43025 |
| Designated Facility Location State: | OH |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

Transporter:

| | |
|---|---|
| Manifest Tracking Number: | 006883758SKS |
| Transporter Line Number: | 1 |
| Transporter EPA ID: | TXR000081205 |
| Transporter Name: | Safety-Kleen Systems, Inc. |

| | |
|---|---|
| Manifest Tracking Number: | 006883758SKS |
| Transporter Line Number: | 2 |
| Transporter EPA ID: | MAD039322250 |
| Transporter Name: | Clean Harbors Environmental Services, Inc. |

| | |
|---|---|
| Manifest Tracking Number: | 006883758SKS |
| Transporter Line Number: | 3 |
| Transporter EPA ID: | NJD071629976 |
| Transporter Name: | Sj Transportation Co Inc |

| | |
|---|---|
| Manifest Tracking Number: | 006883758SKS |
| Transporter Line Number: | 4 |
| Transporter EPA ID: | ALD067138891 |
| Transporter Name: | Robbie D Wood Incorporated |

Waste Line:

| | |
|---|---|
| Manifest Tracking Number: | 006883758SKS |
| Waste Line Number: | 1 |
| U.S. DOT Hazardous Indicator: | Y |
| U.S. DOT ID Number: | UN2810 |
| U.S. DOT Description: | Un2810, Waste Un2810 Waste Toxic Liquid,Organic N.O.S. ) (D007,D039,D040(E (Tetrachloroethylene, Trichloroethylene) 6.1 Pgiii Rq(F002), 6.1, Pg Iii |
| Non-Hazardous Waste Description: | Not reported |
| Number of Containers: | 2 |
| Container Type Code: | DM |
| Container Type Description: | Metal drums, barrels, kegs |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Waste Quantity: | 200 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 0.1 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 0.1 |
| Waste Quantity, in Kilograms: | 90.703 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 90.703 |
| Management Method Code: | H020 |
| Management Method Description: | SOLVENTS RECOVERY |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | D007, D039, D040, F002 |
| Quantity Haz Kg: | 90.703 |
| Quantity Haz Tons: | 0.1 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-R |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYD982531568 |
| Country: | USA |
| Name: | 359 South Broadway Cleaners |
| Address: | 359 S BROADWAY |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | 359 S BROADWAY |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | 359 South Broadway Cleaners |
| Mailing Contact: | 359 South Broadway Cleaners |
| Mailing Address 1: | 359 SO BROADWAY |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | YONKERS, NY 10705 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 9144768579 |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

Manifest Data:

| | |
|---|---|
| Document ID: | NYC1812172 |
| Manifest Status: | Not reported |
| Trans1 State ID: | GP2381NY |
| Year: | 1992 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 08/10/1992 |
| Trans1 Recv Date: | 08/10/1992 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 08/10/1992 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD982531568 |
| Trans1 EPA ID: | ILD051060408 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00035 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | NYC1542587 |
| Manifest Status: | Not reported |
| Trans1 State ID: | AV4489 |
| Year: | 1992 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 03/23/1992 |
| Trans1 Recv Date: | 03/23/1992 |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 03/23/1992 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD982531568 |
| Trans1 EPA ID: | ILD051060408 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00060 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC5601486 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYCR2436 |
| Year: | 1999 |
| Trans2 State ID: | T422NXNJ |
| Generator Ship Date: | 04/14/1999 |
| Trans1 Recv Date: | 04/14/1999 |
| Trans2 Recv Date: | 04/19/1999 |
| TSD Site Recv Date: | 04/20/1999 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD982531568 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | SCD987574647 |
| TSDF ID 1: | OHD980587364 |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00195 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | NYC3312854 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYGT9066 |
| Year: | 1994 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 11/02/1994 |
| Trans1 Recv Date: | 11/02/1994 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 11/02/1994 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD982531568 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00195 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | NYC3359880 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYGT9066 |
| Year: | 1994 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 11/28/1994 |
| Trans1 Recv Date: | 11/28/1994 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 11/28/1994 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD982531568 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.

| | |
|---|---|
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00060 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC2697030 |
| Manifest Status: | Not reported |
| Trans1 State ID: | GP2381NY |
| Year: | 1993 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 11/30/1993 |
| Trans1 Recv Date: | 11/30/1993 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 11/30/1993 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD982531568 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00060 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC6572935 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYCR2436 |
| Year: | 2001 |
| Trans2 State ID: | T467GL |
| Generator Ship Date: | 09/04/2001 |
| Trans1 Recv Date: | 09/04/2001 |
| Trans2 Recv Date: | 09/07/2001 |
| TSD Site Recv Date: | 09/11/2001 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD982531568 |
| Trans1 EPA ID: | SCR000075150 |
| Trans2 EPA ID: | NJD071629976 |
| TSDF ID 1: | OHD980587364 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00195 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC1876206 |
| Manifest Status: | Not reported |
| Trans1 State ID: | GP2381NY |
| Year: | 1992 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 10/08/1992 |
| Trans1 Recv Date: | 10/08/1992 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 10/08/1992 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD982531568 |
| Trans1 EPA ID: | ILD051060408 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00095 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC6106138 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYR2436 |
| Year: | 2000 |
| Trans2 State ID: | NJT162VW |
| Generator Ship Date: | 03/27/2000 |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Trans1 Recv Date: | 03/27/2000 |
| Trans2 Recv Date: | 03/30/2000 |
| TSD Site Recv Date: | 04/01/2000 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD982531568 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | SCR000074591 |
| TSDF ID 1: | OHD980587364 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00060 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC6160487 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYCR2436 |
| Year: | 2000 |
| Trans2 State ID: | T104414IL |
| Generator Ship Date: | 08/03/2000 |
| Trans1 Recv Date: | 08/03/2000 |
| Trans2 Recv Date: | 08/07/2000 |
| TSD Site Recv Date: | 08/10/2000 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD982531568 |
| Trans1 EPA ID: | SCR000075150 |
| Trans2 EPA ID: | SCR000074591 |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| TSDF ID 1: | OHD980587364 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00195 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | NYC6340702 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYCR2436 |
| Year: | 2001 |
| Trans2 State ID: | TNT218034 |
| Generator Ship Date: | 01/23/2001 |
| Trans1 Recv Date: | 01/23/2001 |
| Trans2 Recv Date: | 01/24/2001 |
| TSD Site Recv Date: | 02/01/2001 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD982531568 |
| Trans1 EPA ID: | SCR000075150 |
| Trans2 EPA ID: | SCR000074591 |
| TSDF ID 1: | OHD980587364 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

Discr Partial Reject Indicator: Not reported
Discr Full Reject Indicator: Not reported
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: Not reported
Waste Code 1: The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 00060
Units: Pounds
Number of Containers: 001
Container Type: Fiberboard or plastic drums, barrels, kegs
Handling Method: Burn
Specific Gravity: 01.00
Waste Code 7: The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.
Waste Code 8: Not reported
Waste Code: Not reported
Waste Code 10: Not reported
Waste Code 11: Not reported
Quantity: 00195
Units: Pounds
Number of Containers: 001
Container Type: Fiberboard or plastic drums, barrels, kegs
Handling Method: Burn
Specific Gravity: 01.00

Click this hyperlink while viewing on your computer to access
144 additional NY MANIFEST: record(s) in the EDR Site Report.

RI MANIFEST:
Name: 359 S BROADWAY CLEANERS
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY 10705
EPA Id: NYD982531568
GEN Cert Date: 9/9/2010
Manifest Document Number: 002486684SKS

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Waste Description: | TOXIC LIQUIDS ORGANIC NOS |
| TSDF Id: | Not reported |
| TSDF Name: | Not reported |
| Qty: | 240 |
| WT/Vol Units: | P |
| TSDF Date: | Not reported |
| Transporter 2 Id: | NJD071629976 |
| Item Number: | 1 |
| Transporter 2 Name: | 9/17/2010 |
| Transporter Name 2: | SAFETY KLEEN |
| Transporter EPAID: | TXR000050930 |
| Transporter Receipt Date: | 9/9/2010 |
| Number Of Containers: | 2 |
| Container Type: | DF |
| Waste Code1: | D007 |
| Waste Code2: | D029 |
| Waste Code3: | D039 |
| Waste Code4: | Not reported |
| Waste Code5: | Not reported |
| Waste Code6: | Not reported |
| Fee Exempt Code: | Not reported |
| Comment: | Not reported |
| Transporter Name 2: | SJ TRANSPORTATION CO INC |
| Company Permit Number: | Not reported |
| Year: | Not reported |
| Quarter: | Not reported |
| Transporter Contact Name: | Not reported |
| Transporter Contact Email: | Not reported |
| Filing Date: | Not reported |
| Total Fee: | Not reported |
| Billing Name: | Not reported |
| Paid Date: | Not reported |
| Paid Time: | Not reported |
| Facility Receipt Date: | Not reported |
| Fee: | Not reported |
| Manifest Created Date: | Not reported |
| Manifest Updated Date: | Not reported |

RI MANIFEST:

| | |
|---|---|
| Transporter Receipt Date: | 9/9/2010 |
| Number Of Containers: | 2 |
| Container Type: | DF |
| Waste Code1: | D007 |
| Waste Code2: | D029 |
| Waste Code3: | D039 |
| Waste Code4: | Not reported |
| Waste Code5: | Not reported |
| Waste Code6: | Not reported |
| Comment: | Not reported |
| Fee Exempt Code: | Not reported |
| TSDF Name: | Not reported |
| TSDF Id: | Not reported |
| Transporter Name 2: | SJ TRANSPORTATION CO INC |
| Company Permit Number: | Not reported |
| Year: | Not reported |
| EPA ID: | NYD982531568 |
| Manifest Docket Number: | 002486684SKS |
| Quarter: | Not reported |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Waste Description: | TOXIC LIQUIDS ORGANIC NOS |
| Transporter Contact Name: | Not reported |
| Quantity: | 240 |
| Transporter Contact Email: | Not reported |
| WT/Vol Units: | P |
| Filing Date: | Not reported |
| Total Fee: | Not reported |
| Item Number: | 1 |
| Transporter Name: | SAFETY KLEEN |
| Billing Name: | Not reported |
| Transporter EPA ID: | TXR000050930 |
| Date Paid: | Not reported |
| Time Paid: | Not reported |
| GEN Cert Date: | 9/9/2010 |
| Facility Receipt Date: | Not reported |
| Fee: | Not reported |
| Transporter 2 Receipt Date: | 9/17/2010 |
| Manifest Created Date: | Not reported |
| TSDF Receipt Date: | Not reported |
| Transporter 2 ID: | NJD071629976 |
| Manifest Updated Date: | Not reported |
| | |
| Transporter Receipt Date: | 9/9/2010 |
| Number Of Containers: | 2 |
| Container Type: | DF |
| Waste Code1: | D007 |
| Waste Code2: | D029 |
| Waste Code3: | D039 |
| Waste Code4: | Not reported |
| Waste Code5: | Not reported |
| Waste Code6: | Not reported |
| Comment: | Not reported |
| Fee Exempt Code: | Not reported |
| TSDF Name: | Not reported |
| TSDF Id: | Not reported |
| Transporter Name 2: | SJ TRANSPORTATION CO INC |
| Company Permit Number: | Not reported |
| Year: | Not reported |
| EPA ID: | NYD982531568 |
| Manifest Docket Number: | 002486684SKS |
| Quarter: | Not reported |
| Waste Description: | TOXIC LIQUIDS ORGANIC NOS |
| Transporter Contact Name: | Not reported |
| Quantity: | 240 |
| Transporter Contact Email: | Not reported |
| WT/Vol Units: | P |
| Filing Date: | Not reported |
| Total Fee: | Not reported |
| Item Number: | 1 |
| Transporter Name: | SAFETY KLEEN |
| Billing Name: | Not reported |
| Transporter EPA ID: | TXR000050930 |
| Date Paid: | Not reported |
| Time Paid: | Not reported |
| GEN Cert Date: | 9/9/2010 |
| Facility Receipt Date: | Not reported |
| Fee: | Not reported |

**359 S BROADWAY CLEANERS (Continued)** **1000351726**

| | |
|---|---|
| Transporter 2 Receipt Date: | 9/17/2010 |
| Manifest Created Date: | Not reported |
| TSDF Receipt Date: | Not reported |
| Transporter 2 ID: | NJD071629976 |
| Manifest Updated Date: | Not reported |

---

**W213** **FOUR SEASONS DRYCLEANER** **NY DRYCLEANERS** **S126282125**
**ENE** **359 S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.217 mi.**
**1147 ft.** **Site 5 of 6 in cluster W**

**Relative:** **Higher**

**Actual:** **81 ft.**

DRYCLEANERS:

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/14/2011 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/04/2013 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/10/2014 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |

**FOUR SEASONS DRYCLEANER (Continued)** **S126282125**

Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 07/27/2000
Inspection Date: 04/09/2015
Install Date: Not reported
Expiration Date: 06/10/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 07/27/2000
Inspection Date: 04/13/2017
Install Date: Not reported
Expiration Date: 06/10/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 07/27/2000
Inspection Date: 04/21/2016
Install Date: Not reported
Expiration Date: 06/10/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579

**FOUR SEASONS DRYCLEANER (Continued)** **S126282125**

| | |
|---|---|
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/13/2019 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 06/25/2020 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/22/2021 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/18/2022 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |

**FOUR SEASONS DRYCLEANER (Continued)** **S126282125**

Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 06/10/2019
Inspection Date: 04/24/2002
Install Date: Not reported
Expiration Date: 10/02/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 06/10/2019
Inspection Date: 04/17/2002
Install Date: Not reported
Expiration Date: 10/02/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 06/10/2019
Inspection Date: 04/17/2003
Install Date: Not reported
Expiration Date: 10/02/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 06/10/2019

**FOUR SEASONS DRYCLEANER (Continued)** **S126282125**

| | |
|---|---|
| Inspection Date: | 04/14/2004 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/14/2005 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/13/2006 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/12/2007 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

**FOUR SEASONS DRYCLEANER (Continued)** **S126282125**

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/17/2008 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/17/2009 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/15/2010 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/11/2012 |
| Install Date: | Not reported |

**FOUR SEASONS DRYCLEANER (Continued)** **S126282125**

| | |
|---|---|
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/14/2011 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/04/2013 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/10/2014 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |

**FOUR SEASONS DRYCLEANER (Continued)** **S126282125**

| | |
|---|---|
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/09/2015 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/13/2017 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/21/2016 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 06/10/2019 |
| Inspection Date: | 04/13/2019 |
| Install Date: | Not reported |
| Expiration Date: | 10/02/2023 |
| Removal Date: | Not reported |

**FOUR SEASONS DRYCLEANER (Continued)** **S126282125**

Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 06/10/2019
Inspection Date: 06/25/2020
Install Date: Not reported
Expiration Date: 10/02/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 06/10/2019
Inspection Date: 04/22/2021
Install Date: Not reported
Expiration Date: 10/02/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 06/10/2019
Inspection Date: 04/18/2022
Install Date: Not reported
Expiration Date: 10/02/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714

**FOUR SEASONS DRYCLEANER (Continued)** **S126282125**

| | |
|---|---|
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/17/2009 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/15/2010 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/11/2012 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/24/2002 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |

**FOUR SEASONS DRYCLEANER (Continued)** **S126282125**

Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 07/27/2000
Inspection Date: 04/17/2002
Install Date: Not reported
Expiration Date: 06/10/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 07/27/2000
Inspection Date: 04/17/2003
Install Date: Not reported
Expiration Date: 06/10/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported
Registration Effective Date: 07/27/2000
Inspection Date: 04/14/2004
Install Date: Not reported
Expiration Date: 06/10/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: FOUR SEASONS DRYCLEANER
Address: 359 S BROADWAY
City,State,Zip: YONKERS, NY
Facility ID: 3-5518-00714
Phone Number: 9144768579
Region: Not reported

**FOUR SEASONS DRYCLEANER (Continued)** **S126282125**

| | |
|---|---|
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/14/2005 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/13/2006 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/12/2007 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | FOUR SEASONS DRYCLEANER |
| Address: | 359 S BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Facility ID: | 3-5518-00714 |
| Phone Number: | 9144768579 |
| Region: | Not reported |
| Registration Effective Date: | 07/27/2000 |
| Inspection Date: | 04/17/2008 |
| Install Date: | Not reported |
| Expiration Date: | 06/10/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

**W214** **CON EDISON** **NY MANIFEST** **S117318701**
**ENE** **F/O 359 W BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.217 mi.**
**1147 ft.** **Site 6 of 6 in cluster W**

**Relative:**
**Higher**

**Actual:**
**81 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004662664 |
| Country: | USA |
| Name: | Con Edison |
| Address: | F/O 359 W BROADWAY |
| Address 2: | SB497 |
| City,State,Zip: | YONKERS, NY 10701 |
| Zip 4: | Not reported |
| Location Address 1: | F/O 359 W BROADWAY |
| Location Address 2: | SB497 |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PL |
| Mailing Address 2: | 15TH FL |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 09/22/2014 |
| Trans1 Recv Date: | 09/22/2014 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 09/24/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004662664 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 012771844JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CON EDISON (Continued)** **S117318701**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 80 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**AF215** **CON EDISON** **NY MANIFEST** **S117564601**
**SW** **123 VALENTINE LN & HAWTHORNE A** **N/A**
**1/8-1/4** **YONKERS, NY 10703**
**0.220 mi.**
**1159 ft.** **Site 1 of 3 in cluster AF**

**Relative:** **Higher**
**Actual:** **99 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004378204 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 123 VALENTINE LN & HAWTHORNE A |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10703 |
| Zip 4: | Not reported |
| Location Address 1: | 125 VENTINE LANE |
| Location Address 2: | VS754 |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PLACE |
| Mailing Address 2: | 15TH FL |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |

**CON EDISON (Continued)** **S117564601**

| | |
|---|---|
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 10/22/2013 |
| Trans1 Recv Date: | 10/22/2013 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 10/29/2013 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004378204 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 011693673JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 75 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**AF216** **CON EDISON VAULT: 754** **RCRA NonGen / NLR** **1016964916**
**SW** **123 VALENTINE LN & HAWTHORNE AVE** **NYP004378204**
**1/8-1/4** **YONKERS, NY 10703**
**0.220 mi.**
**1159 ft.** **Site 2 of 3 in cluster AF**

**Relative:** **Higher**
**Actual:** **99 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20131122 |
| Handler Name: | Con Edison Vault: 754 |
| Handler Address: | Valentine Ln & Hawthorne Ave |
| Handler City,State,Zip: | YONKERS, NY 10703 |
| EPA ID: | NYP004378204 |
| Contact Name: | THOMAS TEELING |

**CON EDISON VAULT: 754 (Continued)** **1016964916**

| | | |
|---|---|---|
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20140701 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |

**CON EDISON VAULT: 754 (Continued)** **1016964916**

Exporter of Spent Lead Acid Batteries: No
Recycler Activity Without Storage: No
Manifest Broker: No
Sub-Part P Indicator: No

Historic Generators:
Receive Date: 20131022
Handler Name: CON EDISON VAULT: 754
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20131122
Handler Name: CON EDISON VAULT: 754
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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**AB217** **RESIDENCE** **NY LTANKS** **S106737882**
**WNW** **30 FAIRFIELD PLACE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.222 mi.**
**1170 ft.** **Site 3 of 3 in cluster AB**

**Relative:** **Lower**
**Actual:** **51 ft.**

LTANKS:
Name: RESIDENCE
Address: 30 FAIRFIELD PLACE
City,State,Zip: YONKERS, NY
Spill Number/Closed Date: 0411382 / 2005-01-20
Facility ID: 0411382

**RESIDENCE (Continued)** **S106737882**

| | |
|---|---|
| Site ID: | 336567 |
| Spill Date: | 2005-01-20 |
| Spill Cause: | Tank Overfill |
| Spill Source: | Tank Truck |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | KABROWNE |
| Referred To: | Not reported |
| Reported to Dept: | 2005-01-20 |
| CID: | 409 |
| Water Affected: | Not reported |
| Spill Notifier: | Responsible Party |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-01-21 |
| Spill Record Last Update: | 2005-01-27 |
| Spiller Name: | ED ALLEN |
| Spiller Company: | ROBISON OIL |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | BURGER, |
| Spiller Phone: | (914) 963-3405 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 271893 |
| Latitude: | 40.9216130 |
| Longitude: | -73.9050020 |
| DEC Memo: | Not reported |
| Remarks: | WAS CLEANED UP WITH PADS. TANK LOCATED IN THE BASEMENT. |

All Materials:

| | |
|---|---|
| Site ID: | 336567 |
| Operable Unit ID: | 1098588 |
| Operable Unit: | 01 |
| Material ID: | 578757 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 3.00 |
| Units: | G |
| Recovered: | 3.00 |
| Oxygenate: | Not reported |

**AD218** **RITE AID #2541** **NY MANIFEST** **S119071729**
**East** **420 S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.222 mi.**
**1172 ft.** **Site 5 of 6 in cluster AD**

**Relative:**
**Higher**

**Actual:**
**80 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYD986888733 |
| Country: | USA |
| Name: | Rite Aid #2541 |
| Address: | 420 S BROADWAY |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | 420 SOUTH BROADWAY |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10704 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Rite Aid #2541 |
| Mailing Contact: | Oldsmobile Dealership |
| Mailing Address 1: | 420 SOUTH BROADWAY |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | YONKERS, NY 10704 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 7188982568 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | CTD983872698 |
| Year: | 2018 |
| Trans2 State ID: | NJR000063677 |
| Generator Ship Date: | 11/20/2015 |
| Trans1 Recv Date: | 11/20/2015 |
| Trans2 Recv Date: | 11/24/2015 |
| TSD Site Recv Date: | 12/01/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986888733 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | RID040098352 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 008556209FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**RITE AID #2541 (Continued)** **S119071729**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Not reported |
| Waste Code b: | Ignitable Waste |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 8 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Burlap, cloth, paper or plastic bags |
| Handling Method: | Burn |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | CTD983872698 |
| Year: | 2018 |
| Trans2 State ID: | NJR000063677 |
| Generator Ship Date: | 11/20/2015 |
| Trans1 Recv Date: | 11/20/2015 |
| Trans2 Recv Date: | 11/24/2015 |
| TSD Site Recv Date: | 12/01/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986888733 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | RID040098352 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 008556209FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Not reported |
| Waste Code b: | Ignitable Waste |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |

**RITE AID #2541 (Continued)** **S119071729**

| | |
|---|---|
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 10 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Burlap, cloth, paper or plastic bags |
| Handling Method: | Burn |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | CTD983872698 |
| Year: | 2018 |
| Trans2 State ID: | NJR000063677 |
| Generator Ship Date: | 11/20/2015 |
| Trans1 Recv Date: | 11/20/2015 |
| Trans2 Recv Date: | 11/24/2015 |
| TSD Site Recv Date: | 12/01/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986888733 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | RID040098352 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 008556209FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Not reported |
| Waste Code b: | Corrosive Waste |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 10 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiber or plastic boxes, cartons, cases |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

**RITE AID #2541 (Continued)** **S119071729**

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | CTD983872698 |
| Year: | 2018 |
| Trans2 State ID: | NJR000063677 |
| Generator Ship Date: | 11/20/2015 |
| Trans1 Recv Date: | 11/20/2015 |
| Trans2 Recv Date: | 11/24/2015 |
| TSD Site Recv Date: | 12/01/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986888733 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | RID040098352 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 008556209FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Not reported |
| Waste Code b: | 2h-1-Benzopyran-2-One, 4-Hydroxy-3-(3-Oxo-1-Phenylbutyl)-, & Salts, When Present At Concentrations Greater Than 0.3% (Or) Warfarin, & Salts, When Present At Concentrations Greater Than 0.3% |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 0.01 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiber or plastic boxes, cartons, cases |
| Handling Method: | Burn |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | CTD983872698 |
| Year: | 2018 |
| Trans2 State ID: | NJR000063677 |
| Generator Ship Date: | 11/20/2015 |
| Trans1 Recv Date: | 11/20/2015 |
| Trans2 Recv Date: | 11/24/2015 |

**RITE AID #2541 (Continued)** **S119071729**

| | |
|---|---|
| TSD Site Recv Date: | 12/01/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986888733 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | RID040098352 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 008556209FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Not reported |
| Waste Code b: | Ignitable Waste |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 3 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiber or plastic boxes, cartons, cases |
| Handling Method: | Burn |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | CTD983872698 |
| Year: | 2018 |
| Trans2 State ID: | NJR000063677 |
| Generator Ship Date: | 01/28/2014 |
| Trans1 Recv Date: | 01/28/2014 |
| Trans2 Recv Date: | 01/30/2014 |
| TSD Site Recv Date: | 02/13/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986888733 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | INR000110197 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 005411311FLE |
| Import Indicator: | N |

**RITE AID #2541 (Continued)** **S119071729**

| | |
|---|---|
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Ignitable Waste |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 9 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiber or plastic boxes, cartons, cases |
| Handling Method: | Burn |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | CTD983872698 |
| Year: | 2018 |
| Trans2 State ID: | NJR000063677 |
| Generator Ship Date: | 01/28/2014 |
| Trans1 Recv Date: | 01/28/2014 |
| Trans2 Recv Date: | 01/30/2014 |
| TSD Site Recv Date: | 02/13/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986888733 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | INR000110197 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 005411311FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |

**RITE AID #2541 (Continued)** **S119071729**

| | |
|---|---|
| Waste Code a: | Not reported |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Nicotine, & Salts (Or) Pyridine, 3-(1-Methyl-2-Pyrrolidinyl)-,(S)-, & Salts |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 1 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiber or plastic boxes, cartons, cases |
| Handling Method: | Burn |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | CTD983872698 |
| Year: | 2018 |
| Trans2 State ID: | NJR000063677 |
| Generator Ship Date: | 01/28/2014 |
| Trans1 Recv Date: | 01/28/2014 |
| Trans2 Recv Date: | 01/30/2014 |
| TSD Site Recv Date: | 02/13/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986888733 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | INR000110197 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 005411311FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | 2h-1-Benzopyran-2-One, 4-Hydroxy-3-(3-Oxo-1-Phenylbutyl)-, & Salts, When Present At Concentrations Greater Than 0.3% (Or) Warfarin, & Salts, When Present At Concentrations Greater Than 0.3% |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |

**RITE AID #2541 (Continued)** **S119071729**

| | |
|---|---|
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 0.01 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiber or plastic boxes, cartons, cases |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | CTD983872698 |
| Year: | 2018 |
| Trans2 State ID: | NJR000063677 |
| Generator Ship Date: | 01/28/2014 |
| Trans1 Recv Date: | 01/28/2014 |
| Trans2 Recv Date: | 01/30/2014 |
| TSD Site Recv Date: | 02/13/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986888733 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | INR000110197 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 005411311FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Chromium |
| Waste Code b: | Selenium |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 3 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiber or plastic boxes, cartons, cases |
| Handling Method: | Burn |

**RITE AID #2541 (Continued)** **S119071729**

| | |
|---|---|
| Specific Gravity: | 1 |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | CTD983872698 |
| Year: | 2018 |
| Trans2 State ID: | NJR000063677 |
| Generator Ship Date: | 01/28/2014 |
| Trans1 Recv Date: | 01/28/2014 |
| Trans2 Recv Date: | 01/30/2014 |
| TSD Site Recv Date: | 02/13/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986888733 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | INR000110197 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 005411311FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Ignitable Waste |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 8 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiber or plastic boxes, cartons, cases |
| Handling Method: | Burn |
| Specific Gravity: | 1 |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | CTD983872698 |
| Year: | 2018 |
| Trans2 State ID: | NJR000063677 |
| Generator Ship Date: | 01/28/2014 |
| Trans1 Recv Date: | 01/28/2014 |
| Trans2 Recv Date: | 01/30/2014 |

**RITE AID #2541 (Continued)** **S119071729**

| | |
|---|---|
| TSD Site Recv Date: | 02/13/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986888733 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | INR000110197 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 005411311FLE |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H141 |
| Waste Code a: | Ignitable Waste |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 3 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiber or plastic boxes, cartons, cases |
| Handling Method: | Landfill |
| Specific Gravity: | 1 |

Click this hyperlink while viewing on your computer to access
76 additional NY MANIFEST: record(s) in the EDR Site Report.

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**AG219** **CON EDISON MANHOLE: 450** **RCRA NonGen / NLR** **1016966907**
**SE** **S BROADWAY & RADFORD ST** **NY MANIFEST** **NYP004397444**
**1/8-1/4** **YONKERS, NY 10703**
**0.223 mi.**
**1179 ft.** **Site 1 of 12 in cluster AG**

**Relative:**
**Higher**

**Actual:**
**83 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20131225 |
| Handler Name: | Con Edison Manhole: 450 |
| Handler Address: | S Broadway & Radford St |
| Handler City,State,Zip: | YONKERS, NY 10703 |
| EPA ID: | NYP004397444 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |

**CON EDISON MANHOLE: 450 (Continued)** **1016966907**

| | | |
|---|---|---|
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20140701 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |

**CON EDISON MANHOLE: 450 (Continued)** **1016966907**

Manifest Broker: No
Sub-Part P Indicator: No

Historic Generators:
Receive Date: 20131125
Handler Name: CON EDISON MANHOLE: 450
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20131225
Handler Name: CON EDISON MANHOLE: 450
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:
EPA ID: NYP004397444
Country: USA
Name: Con Edison
Address: S BROADWAY & RADFORD ST
Address 2: Not reported
City,State,Zip: YONKERS, NY 10703
Zip 4: Not reported
Location Address 1: S BROADWAY & RADFORD ST
Location Address 2: MH 450
Location City,State,Zip: YONKERS, NY
Location Zip 4: Not reported
Facility Status: Not reported

**CON EDISON MANHOLE: 450 (Continued)** **1016966907**

Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Con Edison
Mailing Address 1: 4 IRVING PL 15TH FL
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 11/25/2013
Trans1 Recv Date: 11/25/2013
Trans2 Recv Date: Not reported
TSD Site Recv Date: 11/26/2013
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004397444
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 011695038JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 150
Units: Pounds
Number of Containers: 1

**CON EDISON MANHOLE: 450 (Continued)** **1016966907**

Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

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**AG220** **CON EDISON MANHOLE: 5383** **NJ MANIFEST** **S120665959**
**SE** **RADFORD ST & BROADWAY 27 FEET** **N/A**
**1/8-1/4** **YONKERS, NY 10702**
**0.223 mi.**
**1179 ft.** **Site 2 of 12 in cluster AG**

**Relative:** **Higher**
**Actual:** **83 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004323259 |
| Name: | CON EDISON MANHOLE: 5383 |
| Address: | RADFORD ST & BROADWAY 27 FEET |
| City,State,Zip: | YONKERS, NY 10702 |
| County: | Not reported |
| Mailing Address: | IRVING PL, RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | GINO FRABASILE |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004323259 |
| Manifest Number: | 015319287JJK |
| Date Shipped: | 12/22/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |

**CON EDISON MANHOLE: 5383 (Continued)** **S120665959**

| | |
|---|---|
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

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**AG221** **CON EDISON TRANSFORMER MANHOLE 485** **RCRA NonGen / NLR** **1014919100**
**SE** **RADFORD AVE & S BROADWAY** **NY MANIFEST** **NYP004232542**
**1/8-1/4** **YONKERS, NY 10703** **NJ MANIFEST**
**0.223 mi.**
**1179 ft.** **Site 3 of 12 in cluster AG**

**Relative:** **Higher**

**Actual:** **83 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20110425 |
| Handler Name: | Con Edison Transformer Manhole 485 |
| Handler Address: | Radford Ave & S Broadway |
| Handler City,State,Zip: | YONKERS, NY 10703 |
| EPA ID: | NYP004232542 |
| Contact Name: | DENNIS ROHRER |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 914-925-6219 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | SR SPECIALIST |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |
| State District: | NYSDEC R2 |
| Mailing Address: | IRVING PLAZA RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Owner Name: | Not reported |
| Owner Type: | Not reported |
| Operator Name: | Not reported |
| Operator Type: | Not reported |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |

**CON EDISON TRANSFORMER MANHOLE 485 (Continued)** **1014919100**

| | |
|---|---|
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20111026 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20110326 |
| Handler Name: | CON EDISON TRANSFORMER MANHOLE 485 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20110425 |
| Handler Name: | CON EDISON TRANSFORMER MANHOLE 485 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |

**CON EDISON TRANSFORMER MANHOLE 485 (Continued)** **1014919100**

Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:
EPA ID: NYP004232542
Country: USA
Name: Consolidated Edison
Address: RADFORD AVE & S BROADWAY
Address 2: TRANSFORMER MH 485
City,State,Zip: YONKERS, NY 10703
Zip 4: Not reported
Location Address 1: RADFORD AVE & SOUTH BROADWAY
Location Address 2: Not reported
Location City,State,Zip: YONKERS, NY 10701
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Consolidated Edison
Mailing Contact: Tom Teeling
Mailing Address 1: 4 IRVING PLACE RM 828
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 03/26/2011
Trans1 Recv Date: 03/26/2011
Trans2 Recv Date: Not reported
TSD Site Recv Date: 03/28/2011
Part A Recv Date: Not reported
Part B Recv Date: Not reported

**CON EDISON TRANSFORMER MANHOLE 485 (Continued)** **1014919100**

Generator EPA ID: NYP004232542
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 007658286JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: Y
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H111
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 500
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

NJ MANIFEST:
EPA ID: NYP004232542
Name: CON EDISON TRANSFORMER MANHOLE 485
Address: RADFORD AVE & S BROADWAY
City,State,Zip: YONKERS, NY 10703
County: Not reported
Mailing Address: IRVING PLAZA RM 828
Mailing City,State,Zip: NEW YORK, NY 10003
Telephone: Not reported
Emergency Telephone: Not reported
Contact: DENNIS ROHRER
Comments: Not reported
SIC Code: Not reported
County: NY119
Municipal: Not reported
Previous EPAID: Not reported
Generator Flag: Not reported
Transporter Flag: Not reported
TSDF Flag: Not reported
Name Change: Not reported

**CON EDISON TRANSFORMER MANHOLE 485 (Continued)** **1014919100**

| | |
|---|---|
| Date Change: | Not reported |
| Manifest Data: | |
| EPA ID: | NYP004232542 |
| Manifest Number: | 007658286JJK |
| Date Shipped: | 3/26/2011 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |
| Waste: | |
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 500.00 |
| Unit: | Pounds |

**AG222** **CON EDISON** **NY MANIFEST** **S117058884**
**SE** **S BROADWAY & RADFORD ST** **N/A**
**1/8-1/4** **YONKERS, NY 10703**
**0.223 mi.**
**1179 ft.** **Site 4 of 12 in cluster AG**

**Relative:**
**Higher**

**Actual:**
**83 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004510228 |
| Country: | USA |
| Name: | Con Edison |
| Address: | S BROADWAY & RADFORD ST |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10703 |
| Zip 4: | Not reported |
| Location Address 1: | S BROADWAY CO RADFORD ST |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PL |
| Mailing Address 2: | 15TH FL |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 04/24/2014 |
| Trans1 Recv Date: | 04/24/2014 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 04/30/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004510228 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 012770982JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CON EDISON (Continued)** **S117058884**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 100 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**AG223** **CON EDISON MANHOLE: 5383** **RCRA NonGen / NLR** **1016960371**
**SE** **RADFORD ST & BROADWAY 27 FEET** **NY MANIFEST** **NYP004323259**
**1/8-1/4** **YONKERS, NY 10702**
**0.223 mi.**
**1179 ft.** **Site 5 of 12 in cluster AG**

**Relative:** **Higher**

**Actual:** **83 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20130727 |
| Handler Name: | Con Edison Manhole: 5383 |
| Handler Address: | Radford St & Broadway 27 Feet |
| Handler City,State,Zip: | YONKERS, NY 10702 |
| EPA ID: | NYP004323259 |
| Contact Name: | GINO FRABASILE |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 914-925-6219 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | SR SPECIALIST |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |
| State District: | NYSDEC R2 |
| Mailing Address: | IRVING PL, RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Owner Name: | Not reported |
| Owner Type: | Not reported |
| Operator Name: | Not reported |
| Operator Type: | Not reported |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |

**CON EDISON MANHOLE: 5383 (Continued)** **1016960371**

| | |
|---|---|
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20140701 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20130627 |
| Handler Name: CON EDISON MANHOLE: 5383 | |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20130727 |
| Handler Name: CON EDISON MANHOLE: 5383 | |

**CON EDISON MANHOLE: 5383 (Continued)** **1016960371**

| | |
|---|---|
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004323259 |
| Country: | USA |
| Name: | Con Edison |
| Address: | RADFORD ST & BROADWAY 27 FEET |
| Address 2: | E OF |
| City,State,Zip: | YONKERS, NY 10702 |
| Zip 4: | Not reported |
| Location Address 1: | RADFORD ST & BROADWAY |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PLACE 15TH FLOOR |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 06/27/2013 |
| Trans1 Recv Date: | 06/27/2013 |

**CON EDISON MANHOLE: 5383 (Continued)** **1016960371**

| | |
|---|---|
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/03/2013 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004323259 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 011693252JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 400 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

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**AG224** **CON EDISON MANHOLE: 450** **RCRA NonGen / NLR** **1017773242**
**SE** **S BROADWAY & RADFORD ST** **NYP004510228**
**1/8-1/4** **YONKERS, NY 10703**
**0.223 mi.**
**1179 ft.** **Site 6 of 12 in cluster AG**

**Relative:** **Higher**
**Actual:** **83 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20140524 |
| Handler Name: | Con Edison Manhole: 450 |
| Handler Address: | S Broadway & Radford St |
| Handler City,State,Zip: | YONKERS, NY 10703 |
| EPA ID: | NYP004510228 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |

**CON EDISON MANHOLE: 450 (Continued)** **1017773242**

| | | |
|---|---|---|
| Contact Email: | | Not reported |
| Contact Title: | | SENIOR SCIENTIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20150211 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

**CON EDISON MANHOLE: 450 (Continued)** **1017773242**

Historic Generators:

| | | |
|---|---|---|
| Receive Date: | | 20140424 |
| Handler Name: | CON EDISON | |
| Federal Waste Generator Description: | | Large Quantity Generator |
| State District Owner: | | Ny |
| Large Quantity Handler of Universal Waste: | | No |
| Recognized Trader Importer: | | No |
| Recognized Trader Exporter: | | No |
| Spent Lead Acid Battery Importer: | | No |
| Spent Lead Acid Battery Exporter: | | No |
| Current Record: | | No |
| Non Storage Recycler Activity: | | Not reported |
| Electronic Manifest Broker: | | Not reported |

| | | |
|---|---|---|
| Receive Date: | | 20140424 |
| Handler Name: | CON EDISON | |
| Federal Waste Generator Description: | | Not a generator, verified |
| State District Owner: | | Ny |
| Large Quantity Handler of Universal Waste: | | No |
| Recognized Trader Importer: | | No |
| Recognized Trader Exporter: | | No |
| Spent Lead Acid Battery Importer: | | No |
| Spent Lead Acid Battery Exporter: | | No |
| Current Record: | | No |
| Non Storage Recycler Activity: | | Not reported |
| Electronic Manifest Broker: | | Not reported |

| | | |
|---|---|---|
| Receive Date: | | 20140524 |
| Handler Name: | CON EDISON MANHOLE: 450 | |
| Federal Waste Generator Description: | | Not a generator, verified |
| State District Owner: | | Ny |
| Large Quantity Handler of Universal Waste: | | No |
| Recognized Trader Importer: | | No |
| Recognized Trader Exporter: | | No |
| Spent Lead Acid Battery Importer: | | No |
| Spent Lead Acid Battery Exporter: | | No |
| Current Record: | | Yes |
| Non Storage Recycler Activity: | | Not reported |
| Electronic Manifest Broker: | | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

**AG225** **CONSOLIDATED EDISON** **NY MANIFEST** **S110824075**
**SE** **RADFORD ST & SOUTH BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.223 mi.**
**1179 ft.** **Site 7 of 12 in cluster AG**

**Relative:**
**Higher**

**Actual:**
**83 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004233542 |
| Country: | USA |
| Name: | Consolidated Edison |
| Address: | RADFORD ST & SOUTH BROADWAY |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10701 |
| Zip 4: | Not reported |
| Location Address 1: | RADFORD ST & SOUTH BROADWAY |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Consolidated Edison |
| Mailing Contact: | Tom Teeling |
| Mailing Address 1: | 4 IRVING PLACE RM 828 |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

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**AE226** **VALENTINE LANE ASSOCIATES, LLC** **NY UST** **U003855175**
**South** **200 VALENTINE LANE** **NY AST** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.227 mi.**
**1197 ft.** **Site 6 of 7 in cluster AE**

**Relative:**
**Higher**

**Actual:**
**121 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | VALENTINE LANE ASSOCIATES, LLC |
| Address: | 200 VALENTINE LANE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-600006 / Active |
| Operator Name: | Rene Feliciano |
| Owner Name: | Valentine Lane Associates |
| Owner Street: | 55 Watermill Lane |
| Owner Address2: | Suite 100 |
| Owner City: | Great Neck |
| Owner State: | NY |
| Owner Zipcode: | 11021 |
| GDS Number: | Not reported |
| | |
| Tank Number: | 1 |
| Status: | 3. Closed - Removed |
| Capacity: | 5000 |
| Product Stored: | Not reported |
| Product Stored Percent: | 0 |
| Tank Leak Detection: | 0. None |
| Date Installation: | 01/01/1900 |

**VALENTINE LANE ASSOCIATES, LLC (Continued)** **U003855175**

| | |
|---|---|
| Date Perm Closure: | 01/01/1997 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 1. Float Vent Valve |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 1. Submersible |

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | VALENTINE LANE ASSOCIATES, LLC |
| Address: | 200 VALENTINE LANE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-600006 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Rene Feliciano |
| Owner Name: | Valentine Lane Associates |
| Owner Street: | 55 Watermill Lane |
| Owner Address2: | Suite 100 |
| Owner City/State/Zip: | Great Neck, NY 11021 |

| | |
|---|---|
| Tank Number: | 2 |
| Status: | 1. In-Service |
| Date Installation: | 02/07/1997 |
| Capacity: | 5000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | 0 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 3. Stainless steel alloy |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on Ground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 6. Wrapped (Piping) |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only),5. Vent Whistle |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

**AE227** **CONSOLIDATED EDISON COMPANY OF NY** **RCRA NonGen / NLR** **1016960438**
**South** **200 VALENTINE LN** **E MANIFEST** **NYP004324083**
**1/8-1/4** **YONKERS, NY 10705** **NY MANIFEST**
**0.227 mi.**
**1197 ft.** **Site 7 of 7 in cluster AE**

**Relative:** **Higher**
**Actual:** **121 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20130802 |
| Handler Name: | | Con Edison Service Box: 683 |
| Handler Address: | | Valentine Ln & Gray Pl |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYP004324083 |
| Contact Name: | | CHRISTOPHER BLAICH |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 914-925-6219 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | SR SPECIALIST |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, RM 828 |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |

**CONSOLIDATED EDISON COMPANY OF NY (Continued)** **1016960438**

| | |
|---|---|
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20140701 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20130702 |
| Handler Name: CON EDISON SERVICE BOX: | 683 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20130802 |
| Handler Name: CON EDISON SERVICE BOX: | 683 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

**CONSOLIDATED EDISON COMPANY OF NY (Continued)** **1016960438**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 023096163JJK |
| Last Updated Date: | 20211208 |
| Shipped Date: | 20211127 |
| Received Date: | 20211201 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Consolidated Edison Company Of Ny |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 200 VALENTINE LN |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 36 BUTLER ST |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | ELIZABETH |
| Generator Mail Zip: | 07206 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | KEARNY |
| Designated Facility Location Zip: | 07032 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |
| Rejection Indicator: | N |

Transporter:

| | |
|---|---|
| Manifest Tracking Number: | 023096163JJK |
| Transporter Line Number: | 1 |
| Transporter EPA ID: | NJD003812047 |
| Transporter Name: | Acv Environmental Services Inc. |

Waste Line:

| | |
|---|---|
| Manifest Tracking Number: | 023096163JJK |
| Waste Line Number: | 1 |
| U.S. DOT Hazardous Indicator: | Y |
| U.S. DOT ID Number: | NA3082 |
| U.S. DOT Description: | Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq |
| Non-Hazardous Waste Description: | Not reported |
| Number of Containers: | 1 |
| Container Type Code: | TT |

**CONSOLIDATED EDISON COMPANY OF NY (Continued)** **1016960438**

| | |
|---|---|
| Container Type Description: | Cargo tanks (tank trucks) |
| Waste Quantity: | 2000 |
| Quantity Unit of Measure Code: | P |
| Quantity Unit of Measure Description: | Pounds |
| Waste Quantity, in Tons: | 1 |
| Acute Waste Quantity, in Tons: | 0 |
| Non-Acute Waste Quantity, in Tons: | 1 |
| Waste Quantity, in Kilograms: | 907.03 |
| Acute Waste Quantity, in Kilograms: | 0 |
| Non-Acute Waste Quantity, in Kilorgrams: | 907.03 |
| Management Method Code: | H110 |
| Management Method Description: | STABILIZATION |
| Waste Residue Indicator: | N |
| Quantity Discrepancy Indicator: | N |
| Waste Type Discrepancy Indicator: | N |
| Waste Density: | Not reported |
| Waste Density Unit of Measure Code: | Not reported |
| Waste Density Unit of Measure Description: | Not reported |
| Form Code: | Not reported |
| Form Code Description: | Not reported |
| Source Code: | Not reported |
| Source Code Description: | Not reported |
| Waste Minimization Code: | Not reported |
| Waste Minimization Code Description: | Not reported |
| Consent Number: | Not reported |
| EPA Waste Indicator: | Y |
| Federal Waste Codes: | D008 |
| Quantity Haz Kg: | 907.03 |
| Quantity Haz Tons: | 1 |
| Quantity Non Haz Kg: | 0 |
| Quantity Non Haz Tons: | 0 |
| State Waste Codes: | NY-T |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004324083 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 200 VALENTINE LN & GRAY PL |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | 200 VALENTINE LANE |
| Location Address 2: | SB # 683 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PLACE 15TH FLOOR |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |

**CONSOLIDATED EDISON COMPANY OF NY (Continued)** **1016960438**

Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NJD003812047
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 07/02/2013
Trans1 Recv Date: 07/02/2013
Trans2 Recv Date: Not reported
TSD Site Recv Date: 07/03/2013
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004324083
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD991291105
TSDF ID 2: Not reported
Manifest Tracking Number: 002016747GBF
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 100
Units: Gallons (liquids only)
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

**AG228** **CON EDISON** **NJ MANIFEST** **S120668481**
**SE** **471 S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.229 mi.**
**1208 ft.** **Site 8 of 12 in cluster AG**

**Relative:**
**Higher**

**Actual:**
**85 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004745204 |
| Name: | CON EDISON |
| Address: | 471 S BROADWAY |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004745204 |
| Manifest Number: | 014091851JJK |
| Date Shipped: | 3/6/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |

**CON EDISON (Continued)** **S120668481**

| | |
|---|---|
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

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**AG229** **CON EDISON** **RCRA NonGen / NLR** **1018279679**
**SE** **471 S BROADWAY** **FINDS** **NYP004745204**
**1/8-1/4** **YONKERS, NY 10705** **ECHO**
**0.229 mi.**
**1208 ft.** **Site 9 of 12 in cluster AG**

**Relative:** **Higher**
**Actual:** **85 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20150306 |
| Handler Name: | | Con Edison |
| Handler Address: | | S Broadway |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYP004745204 |
| Contact Name: | | THOMAS TEELING |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 212-460-3770 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |

**CON EDISON (Continued)** **1018279679**

| | |
|---|---|
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160502 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20150306 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20150306 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

**CON EDISON (Continued)** **1018279679**

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110067694864

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1018279679
Registry ID: 110067694864

DFR URL:
Name: CON EDISON
Address: 471 S Broadway
City,State,Zip: YONKERS, NY 10705

---

**AG230** **CON EDISON** **NY MANIFEST** **S117741296**
**SE** **471 S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.229 mi.**
**1208 ft.** **Site 10 of 12 in cluster AG**

**Relative:**
**Higher**

**Actual:**
**85 ft.**

NY MANIFEST:
EPA ID: NYP004745204
Country: USA
Name: Con Edison
Address: 471 S BROADWAY
Address 2: Not reported
City,State,Zip: YONKERS, NY 10705
Zip 4: Not reported
Location Address 1: F/O 471 S BROADWAY
Location Address 2: SB483
Location City,State,Zip: YONKERS, NY 10801
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Con Edison
Mailing Contact: Con Edison
Mailing Address 1: 4 IRVING PL
Mailing Address 2: 15TH FL
Mailing City,State,Zip: NEW YORK, NY 10003

**CON EDISON (Continued)** **S117741296**

Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: Not reported

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 03/06/2015
Trans1 Recv Date: 03/06/2015
Trans2 Recv Date: Not reported
TSD Site Recv Date: 03/09/2015
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004745204
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 014091851JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 50
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

**AF231** **PUBLIC SCHOOL #27** **NY LTANKS** **S100137881**
**SSW** **PUBLIC SCHOOL #27** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.230 mi.**
**1216 ft.** **Site 3 of 3 in cluster AF**

**Relative:**
**Higher**

**Actual:**
**106 ft.**

LTANKS:

| | |
|---|---|
| Name: | PUBLIC SCHOOL #27 |
| Address: | PUBLIC SCHOOL #27 |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 8904052 / 1989-10-13 |
| Facility ID: | 8904052 |
| Site ID: | 130693 |
| Spill Date: | 1989-07-24 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | Not reported |
| Cleanup Ceased: | 1989-10-13 |
| SWIS: | 6018 |
| Investigator: | wxwadswo |
| Referred To: | Not reported |
| Reported to Dept: | 1989-07-24 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1989-07-28 |
| Spill Record Last Update: | 1989-10-20 |
| Spiller Name: | Not reported |
| Spiller Company: | YONKERS BOARD OF EDUC. |
| Spiller Address: | Not reported |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 112616 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was W. WADSWORTH / / : 20K TANK. HORNER EZY CHECK. -.25878 GPH. 10/13/89: RETEST RESULTS PASSED 8/9/89 -.0198GPH. |
| Remarks: | TO ISOLATE & RETEST. |

All TTF:

| | |
|---|---|
| Facility ID: | 8904052 |
| Spill Number: | 8904052 |
| Spill Tank Test: | 1535747 |
| Site ID: | 130693 |
| Tank Number: | Not reported |
| Tank Size: | 0 |
| Material: | 0002 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |

**PUBLIC SCHOOL #27 (Continued)** **S100137881**

| | |
|---|---|
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 130693 |
| Operable Unit ID: | 931823 |
| Operable Unit: | 01 |
| Material ID: | 448121 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | Not reported |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**AG232** **CONSOLIDATED EDISON COMPANY OF NY INC** **E MANIFEST** **1031973869**
**SE** **462 SOUTH BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.232 mi.**
**1227 ft.** **Site 11 of 12 in cluster AG**

**Relative:** **Higher**

**Actual:** **81 ft.**

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 007224027GBF |
| Last Updated Date: | 20220927 |
| Shipped Date: | 20220916 |
| Received Date: | 20220919 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Consolidated Edison Company Of Ny Inc |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 462 SOUTH BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 928 E HAZELWOOD AVE |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | RAHWAY |
| Generator Mail Zip: | 07065 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |

**CONSOLIDATED EDISON COMPANY OF NY INC (Continued)** **1031973869**

Designated Facility Mail Zip: 07032
Designated Facility Mail State: NJ
Designated Facility Location Street Number: 105
Designated Facility Location Street 1: JACOBUS AVE
Designated Facility Location Street 2: Not reported
Designated Facility Location City: KEARNY
Designated Facility Location Zip: 07032
Designated Facility Location State: NJ
Designated Facility Contact Company Name: Not reported
Manifest Residue Indicator: N
Rejection Indicator: N

Transporter:
Manifest Tracking Number: 007224027GBF
Transporter Line Number: 1
Transporter EPA ID: NJD003812047
Transporter Name: Acv Environmental Services Inc.

Waste Line:
Manifest Tracking Number: 007224027GBF
Waste Line Number: 1
U.S. DOT Hazardous Indicator: Y
U.S. DOT ID Number: NA3082
U.S. DOT Description: Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq
Non-Hazardous Waste Description: Not reported
Number of Containers: 1
Container Type Code: TT
Container Type Description: Cargo tanks (tank trucks)
Waste Quantity: 500
Quantity Unit of Measure Code: P
Quantity Unit of Measure Description: Pounds
Waste Quantity, in Tons: 0.25
Acute Waste Quantity, in Tons: 0
Non-Acute Waste Quantity, in Tons: 0.25
Waste Quantity, in Kilograms: 226.7575
Acute Waste Quantity, in Kilograms: 0
Non-Acute Waste Quantity, in Kilorgrams: 226.7575
Management Method Code: H110
Management Method Description: STABILIZATION
Waste Residue Indicator: N
Quantity Discrepancy Indicator: N
Waste Type Discrepancy Indicator: N
Waste Density: Not reported
Waste Density Unit of Measure Code: Not reported
Waste Density Unit of Measure Description: Not reported
Form Code: Not reported
Form Code Description: Not reported
Source Code: Not reported
Source Code Description: Not reported
Waste Minimization Code: Not reported
Waste Minimization Code Description: Not reported
Consent Number: Not reported
EPA Waste Indicator: Y
Federal Waste Codes: D008
Quantity Haz Kg: 226.7575
Quantity Haz Tons: 0.25

**CONSOLIDATED EDISON COMPANY OF NY INC (Continued)** **1031973869**

Quantity Non Haz Kg: 0
Quantity Non Haz Tons: 0
State Waste Codes: NY-T

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**AH233** **CONSOLIDATED EDISON COMPANY OF NY C/O ACV ENVIRO** **RCRA NonGen / NLR** **1018278724**
**ENE** **347 S BROADWAY** **FINDS** **NYP004735056**
**1/8-1/4** **YONKERS, NY 10701** **ECHO**
**0.236 mi.** **E MANIFEST**
**1244 ft.** **Site 1 of 4 in cluster AH**

**Relative:** **Higher**
**Actual:** **83 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20150222 |
| Handler Name: | Con Edison |
| Handler Address: | S Broadway |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYP004735056 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |
| State District: | NYSDEC R2 |
| Mailing Address: | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Owner Name: Not reported | |
| Owner Type: | Not reported |
| Operator Name: Not reported | |
| Operator Type: | Not reported |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |

**CONSOLIDATED EDISON COMPANY OF NY C/O ACV ENVIRO (Continued)** **1018278724**

| | |
|---|---|
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20160502 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20150222 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20150222 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

**CONSOLIDATED EDISON COMPANY OF NY C/O ACV ENVIRO (Continued)** **1018278724**

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110067709992

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1018278724
Registry ID: 110067709992

DFR URL:
Name: CON EDISON
Address: 347 S Broadway
City,State,Zip: YONKERS, NY 10705

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 007224112GBF |
| Last Updated Date: | 20221003 |
| Shipped Date: | 20220921 |
| Received Date: | 20220923 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | NYR000114579 |
| Generator Name: | Consolidated Edison Company Of Ny C/O Acv Enviro |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 347 S BROADWAY |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10701 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 928 E HAZELWOOD AVE |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | RAHWAY |
| Generator Mail Zip: | 07065 |
| Generator Mail State: | NJ |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD991291105 |
| Designated Facility Name: | Clean Earth Of North Jersey |
| Designated Facility Mail Street Number: | 105 |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | JACOBUS AVE |
| Designated Facility Mail City: | KEARNY |
| Designated Facility Mail Zip: | 07032 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | 105 |
| Designated Facility Location Street 1: | JACOBUS AVE |
| Designated Facility Location Street 2: | Not reported |

**CONSOLIDATED EDISON COMPANY OF NY C/O ACV ENVIRO (Continued)** **1018278724**

Designated Facility Location City: KEARNY
Designated Facility Location Zip: 07032
Designated Facility Location State: NJ
Designated Facility Contact Company Name: Not reported
Manifest Residue Indicator: N
Rejection Indicator: N

Transporter:
Manifest Tracking Number: 007224112GBF
Transporter Line Number: 1
Transporter EPA ID: NJD003812047
Transporter Name: Acv Environmental Services Inc.

Waste Line:
Manifest Tracking Number: 007224112GBF
Waste Line Number: 1
U.S. DOT Hazardous Indicator: Y
U.S. DOT ID Number: NA3082
U.S. DOT Description: Na3082, Hazardous Waste, Liquid N.O.S., 9, Pg Iii, Rq
Non-Hazardous Waste Description: Not reported
Number of Containers: 1
Container Type Code: TT
Container Type Description: Cargo tanks (tank trucks)
Waste Quantity: 2000
Quantity Unit of Measure Code: P
Quantity Unit of Measure Description: Pounds
Waste Quantity, in Tons: 1
Acute Waste Quantity, in Tons: 0
Non-Acute Waste Quantity, in Tons: 1
Waste Quantity, in Kilograms: 907.03
Acute Waste Quantity, in Kilograms: 0
Non-Acute Waste Quantity, in Kilorgrams: 907.03
Management Method Code: H110
Management Method Description: STABILIZATION
Waste Residue Indicator: N
Quantity Discrepancy Indicator: N
Waste Type Discrepancy Indicator: N
Waste Density: Not reported
Waste Density Unit of Measure Code: Not reported
Waste Density Unit of Measure Description: Not reported
Form Code: Not reported
Form Code Description: Not reported
Source Code: Not reported
Source Code Description: Not reported
Waste Minimization Code: Not reported
Waste Minimization Code Description: Not reported
Consent Number: Not reported
EPA Waste Indicator: Y
Federal Waste Codes: D008
Quantity Haz Kg: 907.03
Quantity Haz Tons: 1
Quantity Non Haz Kg: 0
Quantity Non Haz Tons: 0
State Waste Codes: NY-T

**AH234** **CON EDISON** **NY MANIFEST** **S117740341**
**ENE** **347 S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.236 mi.**
**1244 ft.** **Site 2 of 4 in cluster AH**

**Relative:**
**Higher**

**Actual:**
**83 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004735056 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 347 S BROADWAY |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | F/O 347 SOUTH BROADWAY |
| Location Address 2: | SB499 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Con Edison |
| Mailing Address 1: | 4 IRVING PL |
| Mailing Address 2: | 15TH FL |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | Not reported |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 02/22/2015 |
| Trans1 Recv Date: | 02/22/2015 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 02/24/2015 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004735056 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 014091808JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CON EDISON (Continued)** **S117740341**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 50 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**AH235** **CON EDISON** **NJ MANIFEST** **S120667579**
**ENE** **347 S BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.236 mi.**
**1244 ft.** **Site 3 of 4 in cluster AH**

**Relative:**
**Higher**

**Actual:**
**83 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004735056 |
| Name: | CON EDISON |
| Address: | 347 S BROADWAY |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004735056 |
| Manifest Number: | 014091808JJK |
| Date Shipped: | 2/22/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |

**CON EDISON (Continued)** **S120667579**

| | |
|---|---|
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

---

**AC236** **CON EDISON** **RCRA NonGen / NLR** **1019908114**
**SE** **12 SAINT ANDREWS PL** **NYP004842122**
**1/8-1/4** **YONKERS, NY 10705**
**0.236 mi.**
**1244 ft.** **Site 10 of 12 in cluster AC**

**Relative:** **Higher**

**Actual:** **88 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20150922 |
| Handler Name: | Con Edison |
| Handler Address: | Saint Andrews Pl |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYP004842122 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |

**CON EDISON (Continued)** **1019908114**

| | | |
|---|---|---|
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20160909 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

Historic Generators:

| | | |
|---|---|---|
| Receive Date: | | 20150922 |
| Handler Name: | CON EDISON | |
| Federal Waste Generator Description: | | Small Quantity Generator |

**CON EDISON (Continued)** **1019908114**

| | |
|---|---|
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |
| Receive Date: | 20150922 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

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**AC237** **CON ED** **NY MANIFEST** **S119077926**
**SE** **12 SAINT ANDREWS PL** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.236 mi.**
**1244 ft.** **Site 11 of 12 in cluster AC**

**Relative:**
**Higher**

**Actual:**
**88 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004842122 |
| Country: | USA |
| Name: | Con Ed |
| Address: | 12 SAINT ANDREWS PL |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | 12 ST ANDREWS PL |
| Location Address 2: | SB 1236 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:
Mailing Name: Con Ed

**CON ED (Continued)** **S119077926**

Mailing Contact: Tom Teeling
Mailing Address 1: 4 IRVING PLACE - 15TH FLOOR
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 09/22/2015
Trans1 Recv Date: 09/22/2015
Trans2 Recv Date: Not reported
TSD Site Recv Date: 09/23/2015
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004842122
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 014472120JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 25
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

**AC238** **CON EDISON** **NJ MANIFEST** **S120677020**
**SE** **12 SAINT ANDREWS PL** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.236 mi.**
**1244 ft.** **Site 12 of 12 in cluster AC**

**Relative:**
**Higher**

**Actual:**
**88 ft.**

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004842122 |
| Name: | CON EDISON |
| Address: | 12 SAINT ANDREWS PL |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | IRVING PL 15TH FL NE |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | THOMAS TEELING |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004842122 |
| Manifest Number: | 014472120JJK |
| Date Shipped: | 9/22/2015 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | Not reported |
| Date Trans2 Transported Waste: | Not reported |
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | Not reported |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |

**CON EDISON (Continued)** **S120677020**

| | |
|---|---|
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | Not reported |
| Reason Load Was Rejected: | Not reported |

---

**AI239** **NEW FRENCH DRY CLEANERS** **RCRA NonGen / NLR** **1000308264**
**SSW** **462 RIVERDALE AVE** **ICIS** **NYD084016377**
**1/8-1/4** **YONKERS, NY 10705** **US AIRS**
**0.237 mi.** **NY MANIFEST**
**1252 ft.** **Site 1 of 3 in cluster AI**

**Relative:** **Higher**
**Actual:** **114 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20070101 |
| Handler Name: | | New French Dry Cleaners |
| Handler Address: | | Riverdale Ave |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYD084016377 |
| Contact Name: | | SHIN WOO LEE |
| Contact Address: | | RIVERDALE AVE |
| Contact City,State,Zip: | | YONKERS, NY 10705 |
| Contact Telephone: | | 914-965-9444 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Not reported |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R3 |
| Mailing Address: | | RIVERDALE AVE |
| Mailing City,State,Zip: | | YONKERS, NY 10705 |
| Owner Name: | Shin-Woo Lee | |
| Owner Type: | | Private |
| Operator Name: | Shin-Woo Lee | |
| Operator Type: | | Private |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

| | |
|---|---|
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150414 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Hazardous Waste Summary:

| | |
|---|---|
| Waste Code: | D000 |
| Waste Description: | Not Defined |

| | |
|---|---|
| Waste Code: | F002 |
| Waste Description: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: SHIN-WOO LEE | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 462 RIVERDALE AVE |
| Owner/Operator City,State,Zip: | YONKERS, NY 10705 |
| Owner/Operator Telephone: | 914-965-9444 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

Owner/Operator Indicator: Owner
Owner/Operator Name: SHIN-WOO LEE
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 462 RIVERDALE AVE
Owner/Operator City,State,Zip: YONKERS, NY 10705
Owner/Operator Telephone: 914-965-9444
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: SHIN-WOO LEE
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 462 RIVERDALE AVE
Owner/Operator City,State,Zip: YONKERS, NY 10705
Owner/Operator Telephone: 914-965-9444
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: SHIN-WOO LEE
Legal Status: Private
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 462 RIVERDALE AVE
Owner/Operator City,State,Zip: YONKERS, NY 10705
Owner/Operator Telephone: 914-965-9444
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20060101
Handler Name: NEW FRENCH DRY CLEANERS
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20070101
Handler Name: NEW FRENCH DRY CLEANERS
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

| | |
|---|---|
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |
| Receive Date: | 19880329 |
| Handler Name: | NEW FRENCH DRY CLEANERS |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

ICIS:

| | |
|---|---|
| Enforcement Action ID: | NY000A0000355180078000310 |
| FRS ID: | 110004372606 |
| Action Name: | NEW FRENCH DRY CLEANERS 36119R263600310 |
| Facility Name: | NEW FRENCH DRY CLEANERS |
| Facility Address: | 462 RIVERDALE AVE<br>YONKERS, NY 107052915 |
| Enforcement Action Type: | Notice of Violation |
| Facility County: | WESTCHESTER |
| Program System Acronym: | AIR |
| Enforcement Action Forum Desc: | Administrative - Informal |
| EA Type Code: | NOV |
| Facility SIC Code: | 7216 |
| Federal Facility ID: | Not reported |
| Latitude in Decimal Degrees: | 40.916275 |
| Longitude in Decimal Degrees: | -73.901801 |
| Permit Type Desc: | Not reported |
| Program System Acronym: | NY0000003551800780 |
| Facility NAICS Code: | 812320 |
| Tribal Land Code: | Not reported |

US AIRS MINOR:
Envid: 1000308264

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

Region Code: 02
Programmatic ID: AIR NY0000003551800780
Facility Registry ID: 110004372606
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:
Region Code: 02
Programmatic ID: AIR NY0000003551800780
Facility Registry ID: 110004372606
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2007-09-11 00:00:00
Activity Status Date: 2007-09-11 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

NY MANIFEST:
EPA ID: NYD084016377
Country: USA
Name: French Dry Cleaners
Address: 462 RIVERDALE AVE
Address 2: Not reported
City,State,Zip: YONKERS, NY 10705
Zip 4: Not reported
Location Address 1: 462 RIVERSIDE AVENUE
Location Address 2: Not reported
Location City,State,Zip: YONKERS, NY 10705
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: French Dry Cleaners
Mailing Contact: Shin Woo Lee
Mailing Address 1: 462 RIVERSIDE AVENUE
Mailing Address 2: Not reported
Mailing City,State,Zip: YONKERS, NY 10705
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 9149659444

Manifest Data:
Document ID: NYC1812161
Manifest Status: Not reported
Trans1 State ID: GP2351NY
Year: 1992
Trans2 State ID: Not reported

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

| | |
|---|---|
| Generator Ship Date: | 08/14/1992 |
| Trans1 Recv Date: | 08/14/1992 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 08/14/1992 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD084016377 |
| Trans1 EPA ID: | ILD051060408 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00195 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC3312843 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYGT9066 |
| Year: | 1994 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 11/02/1994 |
| Trans1 Recv Date: | 11/02/1994 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 11/02/1994 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD084016377 |
| Trans1 EPA ID: | ILD984908202 |

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

| | |
|---|---|
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00120 |
| Units: | Pounds |
| Number of Containers: | 002 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC1876195 |
| Manifest Status: | Not reported |
| Trans1 State ID: | GR2381NY |
| Year: | 1992 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 10/08/1992 |
| Trans1 Recv Date: | 10/08/1992 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 10/08/1992 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD084016377 |
| Trans1 EPA ID: | ILD051060408 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

| | |
|---|---|
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00060 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC6106140 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJT162VW |
| Year: | 2000 |
| Trans2 State ID: | NYRCR2436 |
| Generator Ship Date: | 03/27/2000 |
| Trans1 Recv Date: | 03/27/2000 |
| Trans2 Recv Date: | 03/27/2000 |
| TSD Site Recv Date: | 04/01/2000 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD084016377 |
| Trans1 EPA ID: | SCR000074591 |
| Trans2 EPA ID: | ILD984908202 |
| TSDF ID 1: | OHD980587364 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, |

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.

Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 00195
Units: Pounds
Number of Containers: 001
Container Type: Fiberboard or plastic drums, barrels, kegs
Handling Method: Burn
Specific Gravity: 01.00

Document ID: NYC5135984
Manifest Status: Not reported
Trans1 State ID: CR2346
Year: 1999
Trans2 State ID: ILT104414
Generator Ship Date: 05/17/1999
Trans1 Recv Date: 05/17/1999
Trans2 Recv Date: 05/20/1999
TSD Site Recv Date: 05/20/1999
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYD084016377
Trans1 EPA ID: ILD984908202
Trans2 EPA ID: SCD987574647
TSDF ID 1: OHD980587364
TSDF ID 2: Not reported
Manifest Tracking Number: Not reported
Import Indicator: Not reported
Export Indicator: Not reported
Discr Quantity Indicator: Not reported
Discr Type Indicator: Not reported
Discr Residue Indicator: Not reported
Discr Partial Reject Indicator: Not reported
Discr Full Reject Indicator: Not reported
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: Not reported
Waste Code 1: The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures.

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

| | |
|---|---|
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00120 |
| Units: | Pounds |
| Number of Containers: | 002 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| Waste Code 7: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 8: | Not reported |
| Waste Code: | Not reported |
| Waste Code 10: | Not reported |
| Waste Code 11: | Not reported |
| Quantity: | 00195 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | CTF0674284 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYCR2436 |
| Year: | 1997 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 10/20/1997 |
| Trans1 Recv Date: | 10/20/1997 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 10/23/1997 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD084016377 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | CTD001156009 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00195 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | NYC2882891 |
| Manifest Status: | Not reported |
| Trans1 State ID: | GP2381NY |
| Year: | 1994 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 02/23/1994 |
| Trans1 Recv Date: | 02/23/1994 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 02/23/1994 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD084016377 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The |

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

| | |
|---|---|
| | Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00060 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYG0323559 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NJ420 |
| Year: | 2003 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/03/2003 |
| Trans1 Recv Date: | 07/03/2003 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/17/2003 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD084016377 |
| Trans1 EPA ID: | NJD000564906 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD000564906 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

| | |
|---|---|
| Quantity: | 00020 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |
| Waste Code 7: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 8: | Not reported |
| Waste Code: | Not reported |
| Waste Code 10: | Not reported |
| Waste Code 11: | Not reported |
| Quantity: | 00130 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |
| Waste Code 12: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 13: | Not reported |
| Waste Code 14: | Not reported |
| Waste Code 15: | Not reported |
| Waste Code 16: | Not reported |
| Quantity: | 00080 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Treat |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | NYC5136445 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYCR2436 |
| Year: | 1998 |
| Trans2 State ID: | FY22NXNJ |
| Generator Ship Date: | 11/19/1998 |
| Trans1 Recv Date: | 11/19/1998 |
| Trans2 Recv Date: | 11/23/1998 |
| TSD Site Recv Date: | 12/02/1998 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD084016377 |

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

| | |
|---|---|
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | SCD987574647 |
| TSDF ID 1: | OHD980587364 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00195 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC3518572 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYAU4489 |
| Year: | 1995 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 03/20/1995 |
| Trans1 Recv Date: | 03/20/1995 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 03/20/1995 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD084016377 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

| | |
|---|---|
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00195 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC2260528 |
| Manifest Status: | Not reported |
| Trans1 State ID: | GT9066NY |
| Year: | 1993 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 04/20/1993 |
| Trans1 Recv Date: | 04/20/1993 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 04/20/1993 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD084016377 |
| Trans1 EPA ID: | ILD051060408 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |

**NEW FRENCH DRY CLEANERS (Continued)** **1000308264**

| | |
|---|---|
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00195 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

Click this hyperlink while viewing on your computer to access
39 additional NY MANIFEST: record(s) in the EDR Site Report.

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**AI240** **NEW FRENCH DRY CLEANERS** **FINDS** **1016105826**
**SSW** **462 RIVERDALE AVE** **ECHO** **N/A**
**1/8-1/4** **YONKERS, NY 10705** **DRYCLEANERS**
**0.237 mi.**
**1252 ft.** **Site 2 of 3 in cluster AI**

**Relative:**
**Higher**

**Actual:**
**114 ft.**

FINDS:
Registry ID: 110004372606

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Air Facility System (AFS) contains compliance and permit data for stationary sources of air pollution regulated by the EPA, state, and local air pollution agencies.
The New York Department of Environmental Conservation Facility Information System (FIS) database houses all information about facilities that are regulated or of environmental interest to the state of New York.
ICIS-Air (AIR) AIR is the modernization of the Air Facility System (AFS) into the Integrated Compliance Information System (ICIS). AIR contains enforcement, compliance, and permit data for stationary sources of air pollution regulated by the EPA, State, and Local air pollution agencies.
The Resource Conservation and Recovery Act Information System (RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.

Click this hyperlink while viewing on your computer to access
additional FINDS: detail in the EDR Site Report.

**NEW FRENCH DRY CLEANERS (Continued)** **1016105826**

ECHO:
Envid: 1016105826
Registry ID: 110004372606

DFR URL:
Name: NEW FRENCH DRY CLEANERS
Address: 462 Riverdale Ave
City,State,Zip: YONKERS, NY 10705

DRYCLEANERS:
Registry ID: 110004372606
Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705
Latitude: 40.91612
Longitude: -73.901865

DFR URL:

---

**AI241** **NEW FRENCH DRY CLEANERS** **NY DRYCLEANERS** **S110247425**
**SSW** **462 RIVERDALE AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.237 mi.**
**1252 ft.** **Site 3 of 3 in cluster AI**

**Relative:**
**Higher**

**Actual:**
**114 ft.**

DRYCLEANERS:
Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 07/01/2019
Inspection Date: 04/28/2001
Install Date: Not reported
Expiration Date: 06/27/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 07/01/2019
Inspection Date: 04/29/2003
Install Date: Not reported
Expiration Date: 06/27/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 07/01/2019 |
| Inspection Date: | 04/30/2004 |
| Install Date: | Not reported |
| Expiration Date: | 06/27/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 07/01/2019 |
| Inspection Date: | 04/21/2005 |
| Install Date: | Not reported |
| Expiration Date: | 06/27/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 07/01/2019 |
| Inspection Date: | 04/25/2006 |
| Install Date: | Not reported |
| Expiration Date: | 06/27/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 07/01/2019 |
| Inspection Date: | 04/24/2007 |
| Install Date: | Not reported |

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

| | |
|---|---|
| Expiration Date: | 06/27/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 07/01/2019 |
| Inspection Date: | 04/23/2008 |
| Install Date: | Not reported |
| Expiration Date: | 06/27/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 07/01/2019 |
| Inspection Date: | 04/23/2009 |
| Install Date: | Not reported |
| Expiration Date: | 06/27/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 07/01/2019 |
| Inspection Date: | 04/22/2010 |
| Install Date: | Not reported |
| Expiration Date: | 06/27/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 07/01/2019
Inspection Date: 04/26/2012
Install Date: Not reported
Expiration Date: 06/27/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 07/01/2019
Inspection Date: 04/21/2011
Install Date: Not reported
Expiration Date: 06/27/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 07/01/2019
Inspection Date: 04/19/2013
Install Date: Not reported
Expiration Date: 06/27/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 07/01/2019
Inspection Date: 04/10/2014
Install Date: Not reported
Expiration Date: 06/27/2023
Removal Date: Not reported

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 07/01/2019
Inspection Date: 04/09/2015
Install Date: Not reported
Expiration Date: 06/27/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 07/01/2019
Inspection Date: 04/13/2017
Install Date: Not reported
Expiration Date: 06/27/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 07/01/2019
Inspection Date: 04/21/2016
Install Date: Not reported
Expiration Date: 06/27/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

| | |
|---|---|
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 07/01/2019 |
| Inspection Date: | 04/12/2018 |
| Install Date: | Not reported |
| Expiration Date: | 06/27/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 07/01/2019 |
| Inspection Date: | 04/13/2019 |
| Install Date: | Not reported |
| Expiration Date: | 06/27/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 07/01/2019 |
| Inspection Date: | 06/25/2020 |
| Install Date: | Not reported |
| Expiration Date: | 06/27/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 07/01/2019 |
| Inspection Date: | 04/22/2021 |
| Install Date: | Not reported |
| Expiration Date: | 06/27/2023 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 07/01/2019
Inspection Date: 04/18/2022
Install Date: Not reported
Expiration Date: 06/27/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 12/07/2001
Inspection Date: 04/30/2002
Install Date: Not reported
Expiration Date: 09/11/2007
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 12/07/2001
Inspection Date: 04/28/2001
Install Date: Not reported
Expiration Date: 09/11/2007
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

Registration Effective Date: 12/07/2001
Inspection Date: 04/29/2003
Install Date: Not reported
Expiration Date: 09/11/2007
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 12/07/2001
Inspection Date: 04/30/2004
Install Date: Not reported
Expiration Date: 09/11/2007
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 12/07/2001
Inspection Date: 04/21/2005
Install Date: Not reported
Expiration Date: 09/11/2007
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 12/07/2001
Inspection Date: 04/25/2006
Install Date: Not reported
Expiration Date: 09/11/2007
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 12/07/2001 |
| Inspection Date: | 04/24/2007 |
| Install Date: | Not reported |
| Expiration Date: | 09/11/2007 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 12/07/2001 |
| Inspection Date: | 04/23/2008 |
| Install Date: | Not reported |
| Expiration Date: | 09/11/2007 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 12/07/2001 |
| Inspection Date: | 04/23/2009 |
| Install Date: | Not reported |
| Expiration Date: | 09/11/2007 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 12/07/2001 |
| Inspection Date: | 04/22/2010 |
| Install Date: | Not reported |

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

| | |
|---|---|
| Expiration Date: | 09/11/2007 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 12/07/2001 |
| Inspection Date: | 04/26/2012 |
| Install Date: | Not reported |
| Expiration Date: | 09/11/2007 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 12/07/2001 |
| Inspection Date: | 04/21/2011 |
| Install Date: | Not reported |
| Expiration Date: | 09/11/2007 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 12/07/2001 |
| Inspection Date: | 04/19/2013 |
| Install Date: | Not reported |
| Expiration Date: | 09/11/2007 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 12/07/2001
Inspection Date: 04/10/2014
Install Date: Not reported
Expiration Date: 09/11/2007
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 12/07/2001
Inspection Date: 04/09/2015
Install Date: Not reported
Expiration Date: 09/11/2007
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 12/07/2001
Inspection Date: 04/13/2017
Install Date: Not reported
Expiration Date: 09/11/2007
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 12/07/2001
Inspection Date: 04/21/2016
Install Date: Not reported
Expiration Date: 09/11/2007
Removal Date: Not reported

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

| | |
|---|---|
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 12/07/2001 |
| Inspection Date: | 04/12/2018 |
| Install Date: | Not reported |
| Expiration Date: | 09/11/2007 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 12/07/2001 |
| Inspection Date: | 04/13/2019 |
| Install Date: | Not reported |
| Expiration Date: | 09/11/2007 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 12/07/2001 |
| Inspection Date: | 06/25/2020 |
| Install Date: | Not reported |
| Expiration Date: | 09/11/2007 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

| | |
|---|---|
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 12/07/2001 |
| Inspection Date: | 04/22/2021 |
| Install Date: | Not reported |
| Expiration Date: | 09/11/2007 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 12/07/2001 |
| Inspection Date: | 04/18/2022 |
| Install Date: | Not reported |
| Expiration Date: | 09/11/2007 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/30/2002 |
| Install Date: | Not reported |
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/28/2001 |
| Install Date: | Not reported |
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 10/11/2007
Inspection Date: 04/29/2003
Install Date: Not reported
Expiration Date: 07/01/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 10/11/2007
Inspection Date: 04/30/2004
Install Date: Not reported
Expiration Date: 07/01/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 10/11/2007
Inspection Date: 04/21/2005
Install Date: Not reported
Expiration Date: 07/01/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

| | |
|---|---|
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/25/2006 |
| Install Date: | Not reported |
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/24/2007 |
| Install Date: | Not reported |
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/23/2008 |
| Install Date: | Not reported |
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/23/2009 |
| Install Date: | Not reported |
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/22/2010 |
| Install Date: | Not reported |
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/26/2012 |
| Install Date: | Not reported |
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/21/2011 |
| Install Date: | Not reported |
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/19/2013 |
| Install Date: | Not reported |

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

| | |
|---|---|
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/10/2014 |
| Install Date: | Not reported |
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/09/2015 |
| Install Date: | Not reported |
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY 10705 2915 |
| Facility ID: | 3-5518-00780 |
| Phone Number: | 9149659444 |
| Region: | Not reported |
| Registration Effective Date: | 10/11/2007 |
| Inspection Date: | 04/13/2017 |
| Install Date: | Not reported |
| Expiration Date: | 07/01/2019 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | NEW FRENCH DRY CLEANERS |
| Address: | 462 RIVERDALE AVE |

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 10/11/2007
Inspection Date: 04/21/2016
Install Date: Not reported
Expiration Date: 07/01/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 10/11/2007
Inspection Date: 04/12/2018
Install Date: Not reported
Expiration Date: 07/01/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 10/11/2007
Inspection Date: 04/13/2019
Install Date: Not reported
Expiration Date: 07/01/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 10/11/2007
Inspection Date: 06/25/2020
Install Date: Not reported
Expiration Date: 07/01/2019
Removal Date: Not reported

**NEW FRENCH DRY CLEANERS (Continued)** **S110247425**

Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 10/11/2007
Inspection Date: 04/22/2021
Install Date: Not reported
Expiration Date: 07/01/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 10/11/2007
Inspection Date: 04/18/2022
Install Date: Not reported
Expiration Date: 07/01/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: NEW FRENCH DRY CLEANERS
Address: 462 RIVERDALE AVE
City,State,Zip: YONKERS, NY 10705 2915
Facility ID: 3-5518-00780
Phone Number: 9149659444
Region: Not reported
Registration Effective Date: 07/01/2019
Inspection Date: 04/30/2002
Install Date: Not reported
Expiration Date: 06/27/2023
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

**Z242** **PALAZZO ENTERPRISES, INC.** **NY AST** **A100412043**
**NNW** **267-269 HAWTHORNE AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.238 mi.**
**1258 ft.** **Site 3 of 4 in cluster Z**

**Relative:** **Lower**
**Actual:** **31 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | PALAZZO ENTERPRISES, INC. |
| Address: | 267-269 HAWTHORNE AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-104892 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | PALAZZO ENTERPRISES, INC. |
| Owner Name: | Not reported |
| Owner Street: | 28 Falmouth Road |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10710 |
| | |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 01/01/2003 |
| Capacity: | 4500 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 6. Aboveground in subterranean vault with access for inspections |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 2. Vault (w/ access) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 1. Painted/Asphalt Coating |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 1. Diking (aboveground only) |
| Overfill Prevention: | 5. Vent Whistle |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 2. Suction |

---

**AJ243** **CON EDISON SERVICE BOX: 440** **RCRA NonGen / NLR** **1016967680**
**ENE** **366 S BROADWAY FRONT OF** **NY MANIFEST** **NYP004412789**
**1/8-1/4** **YONKERS, NY 10702**
**0.239 mi.**
**1261 ft.** **Site 1 of 2 in cluster AJ**

**Relative:** **Higher**
**Actual:** **86 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20140206 |
| Handler Name: | Con Edison Service Box: 440 |
| Handler Address: | S Broadway Front Of |
| Handler City,State,Zip: | YONKERS, NY 10702 |
| EPA ID: | NYP004412789 |
| Contact Name: | THOMAS TEELING |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 212-460-3770 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | SENIOR SCIENTIST |

**CON EDISON SERVICE BOX: 440 (Continued)** **1016967680**

| | | |
|---|---|---|
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | IRVING PL, 15TH FL NE |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |
| Human Exposure Controls Indicator: | | N/A |
| Groundwater Controls Indicator: | | N/A |
| Significant Non-Complier Universe: | | No |
| Unaddressed Significant Non-Complier Universe: | | No |
| Addressed Significant Non-Complier Universe: | | No |
| Significant Non-Complier With a Compliance Schedule Universe: | | No |
| Financial Assurance Required: | | Not reported |
| Handler Date of Last Change: | | 20141014 |
| Recognized Trader-Importer: | | No |
| Recognized Trader-Exporter: | | No |
| Importer of Spent Lead Acid Batteries: | | No |
| Exporter of Spent Lead Acid Batteries: | | No |
| Recycler Activity Without Storage: | | No |
| Manifest Broker: | | No |
| Sub-Part P Indicator: | | No |

**CON EDISON SERVICE BOX: 440 (Continued)** **1016967680**

Historic Generators:

| | |
|---|---|
| Receive Date: | 20140106 |
| Handler Name: CON EDISON SERVICE BOX: | 440 |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20140206 |
| Handler Name: CON EDISON SERVICE BOX: | 440 |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004412789 |
| Country: | USA |
| Name: | Con Edison |
| Address: | 366 S BROADWAY FRONT OF |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10702 |
| Zip 4: | Not reported |
| Location Address 1: | F/O 366 SOUTH BROADWAY |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

**CON EDISON SERVICE BOX: 440 (Continued)** **1016967680**

Mailing Name: Con Edison
Mailing Contact: Tom Teeling
Mailing Address 1: 4 IRVING PLACE - 15TH FLOOR
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 01/06/2014
Trans1 Recv Date: 01/06/2014
Trans2 Recv Date: Not reported
TSD Site Recv Date: 01/06/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004412789
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 011693689JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 50
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

**AJ244** **CON EDISON** **NY MANIFEST** **S116045298**
**ENE** **F/O 366 S BROADWAY & MCLEAN AVE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.239 mi.**
**1261 ft.** **Site 2 of 2 in cluster AJ**

**Relative:**
**Higher**

**Actual:**
**86 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004417432 |
| Country: | USA |
| Name: | Con Edison |
| Address: | F/O 366 S BROADWAY & MCLEAN AVE |
| Address 2: | SB 440 |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | F/O 366 S BROADWAY & MCLEAN AVE |
| Location Address 2: | SB 440 |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Tom Teeling |
| Mailing Address 1: | 4 IRVING PLACE - 15TH FLOOR |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 01/13/2014 |
| Trans1 Recv Date: | 01/13/2014 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 01/15/2014 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004417432 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 011695005JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |

**CON EDISON (Continued)** **S116045298**

| | |
|---|---|
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H110 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 25 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**245 West 1/8-1/4 0.240 mi. 1268 ft.** **FRANKLIN RESIDENCE** **NY UST** **U004440206**
**104 FRANKLIN AVENUE** **N/A**
**YONKERS, NY 10705**

**Relative: Higher**

**Actual: 63 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | FRANKLIN RESIDENCE |
| Address: | 104 FRANKLIN AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-800995 / Unregulated |
| Operator Name: | Stephen D. Franklin |
| Owner Name: | Stephen D. Franklin |
| Owner Street: | 104 Franklin Avenue |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10705 |
| GDS Number: | Not reported |
| | |
| Tank Number: | 1 |
| Status: | 3. Closed - Removed |
| Capacity: | 1500 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | Not reported |
| Date Perm Closure: | 09/17/2002 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | Not reported |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | Not reported |
| Piping Location: | 0. No Pipiing |
| Piping Type: | 0. No Pippping |
| Piping External Protection: | 0. None |

**FRANKLIN RESIDENCE (Continued)** **U004440206**

| | |
|---|---|
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

| | |
|---|---|
| Tank Number: | 2 |
| Status: | 0. Administratively closed |
| Capacity: | 1000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 09/01/2002 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 2. Sacrificial Anode (no retrofit) |
| Tank Secondary Containment: | Not reported |
| Piping Location: | Not reported |
| Piping Type: | 0. No Pippping |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | Not reported |
| Spill Prevention: | 0. None |
| Dispenser: | 0. None |

---

**Z246** **34 PIER STREET** **NY AST** **A100355447**
**NNW** **34 PIER STREET** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.243 mi.**
**1281 ft.** **Site 4 of 4 in cluster Z**

**Relative:** **Lower**

**Actual:** **32 ft.**

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | 34 PIER STREET |
| Address: | 34 PIER STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-412740 |
| Site Status: | Active |
| GDS Number: | Not reported |
| Operator Name: | Fawzi Ibrahim |
| Owner Name: | 34 Pier Realty LLC |
| Owner Street: | PO Box 294 |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10710 |

| | |
|---|---|
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Date Installation: | 07/01/1979 |
| Capacity: | 3000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Leak Detection: | 6. Impervious Barrier/Concrete Pad (Aboveground Only) |

**34 PIER STREET (Continued)** **A100355447**

| | |
|---|---|
| Tank Secondary Containment: | 2. Vault (w/ access) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only),5. Vent Whistle |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**AK247** **BROADWAY CLEANERS** **NY DRYCLEANERS** **S110246086**
**SE** **479 SOUTH BROADWAY** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.243 mi.**
**1284 ft.** **Site 1 of 3 in cluster AK**

**Relative:** **Higher**

**Actual:** **88 ft.**

DRYCLEANERS:

| | |
|---|---|
| Name: | BROADWAY CLEANERS |
| Address: | 479 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY 10705 3249 |
| Facility ID: | 3-5518-00767 |
| Phone Number: | 9144230908 |
| Region: | Not reported |
| Registration Effective Date: | 07/11/2019 |
| Inspection Date: | 09/07/2007 |
| Install Date: | Not reported |
| Expiration Date: | 07/11/2029 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | BROADWAY CLEANERS |
| Address: | 479 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY 10705 3249 |
| Facility ID: | 3-5518-00767 |
| Phone Number: | 9144230908 |
| Region: | Not reported |
| Registration Effective Date: | 07/11/2019 |
| Inspection Date: | 09/05/2008 |
| Install Date: | Not reported |
| Expiration Date: | 07/11/2029 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | BROADWAY CLEANERS |
| Address: | 479 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY 10705 3249 |
| Facility ID: | 3-5518-00767 |
| Phone Number: | 9144230908 |
| Region: | Not reported |
| Registration Effective Date: | 07/11/2019 |
| Inspection Date: | 09/08/2009 |
| Install Date: | Not reported |

**BROADWAY CLEANERS (Continued)** **S110246086**

Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 09/08/2010
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 09/09/2011
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 08/22/2012
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY

**BROADWAY CLEANERS (Continued)** **S110246086**

City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 10/15/2014
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 09/10/2013
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 09/10/2015
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 09/09/2016
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported

**BROADWAY CLEANERS (Continued)** **S110246086**

Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 08/25/2018
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 09/14/2017
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 09/12/2019
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767

**BROADWAY CLEANERS (Continued)** **S110246086**

| | |
|---|---|
| Phone Number: | 9144230908 |
| Region: | Not reported |
| Registration Effective Date: | 07/11/2019 |
| Inspection Date: | 12/22/2020 |
| Install Date: | Not reported |
| Expiration Date: | 07/11/2029 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | BROADWAY CLEANERS |
| Address: | 479 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY 10705 3249 |
| Facility ID: | 3-5518-00767 |
| Phone Number: | 9144230908 |
| Region: | Not reported |
| Registration Effective Date: | 07/11/2019 |
| Inspection Date: | 01/29/2022 |
| Install Date: | Not reported |
| Expiration Date: | 07/11/2029 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | BROADWAY CLEANERS |
| Address: | 479 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY 10705 3249 |
| Facility ID: | 3-5518-00767 |
| Phone Number: | 9144230908 |
| Region: | Not reported |
| Registration Effective Date: | 07/11/2019 |
| Inspection Date: | 12/28/2023 |
| Install Date: | Not reported |
| Expiration Date: | 07/11/2029 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | BROADWAY CLEANERS |
| Address: | 479 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY 10705 3249 |
| Facility ID: | 3-5518-00767 |
| Phone Number: | 9144230908 |
| Region: | Not reported |
| Registration Effective Date: | 07/11/2019 |
| Inspection Date: | 12/27/2024 |
| Install Date: | Not reported |
| Expiration Date: | 07/11/2029 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |

**BROADWAY CLEANERS (Continued)** **S110246086**

Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/20/2000
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/18/2001
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/17/2002
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported

**BROADWAY CLEANERS (Continued)** **S110246086**

Registration Effective Date: 09/25/2001
Inspection Date: 09/16/2003
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/16/2004
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/16/2005
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/15/2006
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

**BROADWAY CLEANERS (Continued)** **S110246086**

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/07/2007
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/05/2008
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/08/2009
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/08/2010
Install Date: Not reported

**BROADWAY CLEANERS (Continued)** **S110246086**

Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/09/2011
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 08/22/2012
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 10/15/2014
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY

**BROADWAY CLEANERS (Continued)** **S110246086**

City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/10/2013
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/10/2015
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/09/2016
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 08/25/2018
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported

**BROADWAY CLEANERS (Continued)** **S110246086**

Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/14/2017
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 09/12/2019
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 12/22/2020
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767

**BROADWAY CLEANERS (Continued)** **S110246086**

Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 01/29/2022
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 12/28/2023
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 09/25/2001
Inspection Date: 12/27/2024
Install Date: Not reported
Expiration Date: 03/05/2003
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/20/2000
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported

**BROADWAY CLEANERS (Continued)** **S110246086**

Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/18/2001
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/17/2002
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/16/2003
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported

**BROADWAY CLEANERS (Continued)** **S110246086**

Registration Effective Date: 03/10/2003
Inspection Date: 09/16/2004
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/16/2005
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/15/2006
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/07/2007
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

**BROADWAY CLEANERS (Continued)** **S110246086**

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/05/2008
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/08/2009
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/08/2010
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/09/2011
Install Date: Not reported

**BROADWAY CLEANERS (Continued)** **S110246086**

Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 08/22/2012
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 10/15/2014
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/10/2013
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY

**BROADWAY CLEANERS (Continued)** **S110246086**

City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/10/2015
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/09/2016
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 08/25/2018
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/14/2017
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported

**BROADWAY CLEANERS (Continued)** **S110246086**

Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 09/12/2019
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 12/22/2020
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 01/29/2022
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767

**BROADWAY CLEANERS (Continued)** **S110246086**

Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 12/28/2023
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 03/10/2003
Inspection Date: 12/27/2024
Install Date: Not reported
Expiration Date: 07/11/2019
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 09/20/2000
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 09/18/2001
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported

**BROADWAY CLEANERS (Continued)** **S110246086**

Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 09/17/2002
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 09/16/2003
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported
Registration Effective Date: 07/11/2019
Inspection Date: 09/16/2004
Install Date: Not reported
Expiration Date: 07/11/2029
Removal Date: Not reported
Drop Shop: Not reported
Shutdown: Not reported
Alternate Solvent: Perchloroethylene; CAS 127-18-4
Current Business: Not reported

Name: BROADWAY CLEANERS
Address: 479 SOUTH BROADWAY
City,State,Zip: YONKERS, NY 10705 3249
Facility ID: 3-5518-00767
Phone Number: 9144230908
Region: Not reported

**BROADWAY CLEANERS (Continued)** **S110246086**

| | |
|---|---|
| Registration Effective Date: | 07/11/2019 |
| Inspection Date: | 09/16/2005 |
| Install Date: | Not reported |
| Expiration Date: | 07/11/2029 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

| | |
|---|---|
| Name: | BROADWAY CLEANERS |
| Address: | 479 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY 10705 3249 |
| Facility ID: | 3-5518-00767 |
| Phone Number: | 9144230908 |
| Region: | Not reported |
| Registration Effective Date: | 07/11/2019 |
| Inspection Date: | 09/15/2006 |
| Install Date: | Not reported |
| Expiration Date: | 07/11/2029 |
| Removal Date: | Not reported |
| Drop Shop: | Not reported |
| Shutdown: | Not reported |
| Alternate Solvent: | Perchloroethylene; CAS 127-18-4 |
| Current Business: | Not reported |

---

**AK248** **BROADWAY CLEANERS** **RCRA-VSQG** **1004757575**
**SE** **479 S BROADWAY** **ICIS** **NYD986943413**
**1/8-1/4** **YONKERS, NY 10705** **US AIRS**
**0.243 mi.** **NY MANIFEST**
**1284 ft.** **Site 2 of 3 in cluster AK**

**Relative:** **Higher**
**Actual:** **88 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20070101 |
| Handler Name: | Broadway Cleaners |
| Handler Address: | S Broadway |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYD986943413 |
| Contact Name: | CHUL WON KANG |
| Contact Address: | S BROADWAY |
| Contact City,State,Zip: | YONKERS, NY 10705 |
| Contact Telephone: | 914-423-0908 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Not reported |
| Federal Waste Generator Description: | Conditionally Exempt Small Quantity Generator |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Handler Activities |
| State District Owner: | Ny |
| State District: | NYSDEC R3 |
| Mailing Address: | S BROADWAY |
| Mailing City,State,Zip: | YONKERS, NY 10705 |
| Owner Name: | Chul Won Kang |
| Owner Type: | Private |

**BROADWAY CLEANERS (Continued)** **1004757575**

| | |
|---|---|
| Operator Name: | Chul Won Kang |
| Operator Type: | Private |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150414 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Hazardous Waste Summary:

| | |
|---|---|
| Waste Code: | D000 |
| Waste Description: | Not Defined |
| Waste Code: | F002 |
| Waste Description: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And |

**BROADWAY CLEANERS (Continued)** **1004757575**

Spent Solvent Mixtures.

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: CHUL WON KANG | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 479 S BROADWAY |
| Owner/Operator City,State,Zip: | YONKERS, NY 10705 |
| Owner/Operator Telephone: | 914-423-0908 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: CHUL WON KANG | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 479 S BROADWAY |
| Owner/Operator City,State,Zip: | YONKERS, NY 10705 |
| Owner/Operator Telephone: | 914-423-0908 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: CHUL WON KANG | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 479 S BROADWAY |
| Owner/Operator City,State,Zip: | YONKERS, NY 10705 |
| Owner/Operator Telephone: | 914-423-0908 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

| | |
|---|---|
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: CHUL WON KANG | |
| Legal Status: | Private |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 479 S BROADWAY |
| Owner/Operator City,State,Zip: | YONKERS, NY 10705 |
| Owner/Operator Telephone: | 914-423-0908 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20060101 |
| Handler Name: BROADWAY CLEANERS | |
| Federal Waste Generator Description: | Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator |

**BROADWAY CLEANERS (Continued)** **1004757575**

State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20070101
Handler Name: BROADWAY CLEANERS
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19910308
Handler Name: BROADWAY CLEANERS
Federal Waste Generator Description: Very Small Quantity Generator (formerly Conditionally-Exempt Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Has the Facility Received Notices of Violations:
Found Violation: No
Agency Which Determined Violation: Not reported
Violation Short Description: Not reported
Date Violation was Determined: Not reported
Actual Return to Compliance Date: Not reported
Return to Compliance Qualifier: Not reported
Violation Responsible Agency: Not reported
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported
Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported

**BROADWAY CLEANERS (Continued)** **1004757575**

| | |
|---|---|
| Appeal Initiated Date: | Not reported |
| Appeal Resolution Date: | Not reported |
| Disposition Status Date: | Not reported |
| Disposition Status: | Not reported |
| Disposition Status Description: | Not reported |
| Consent/Final Order Sequence Number: | Not reported |
| Consent/Final Order Respondent Name: | Not reported |
| Consent/Final Order Lead Agency: | Not reported |
| Enforcement Type: | Not reported |
| Enforcement Responsible Person: | Not reported |
| Enforcement Responsible Sub-Organization: | Not reported |
| SEP Sequence Number: | Not reported |
| SEP Expenditure Amount: | Not reported |
| SEP Scheduled Completion Date: | Not reported |
| SEP Actual Date: | Not reported |
| SEP Defaulted Date: | Not reported |
| SEP Type: | Not reported |
| SEP Type Description: | Not reported |
| Proposed Amount: | Not reported |
| Final Monetary Amount: | Not reported |
| Paid Amount: | Not reported |
| Final Count: | Not reported |
| Final Amount: | Not reported |

Evaluation Action Summary:

| | |
|---|---|
| Evaluation Date: | 20140227 |
| Evaluation Responsible Agency: | EPA |
| Found Violation: | No |
| Evaluation Type Description: | COMPLIANCE EVALUATION INSPECTION |
| Evaluation Responsible Person Identifier: | R2RV |
| Evaluation Responsible Sub-Organization: | RCB |
| Actual Return to Compliance Date: | Not reported |
| Scheduled Compliance Date: | Not reported |
| Date of Request: | Not reported |
| Date Response Received: | Not reported |
| Request Agency: | Not reported |
| Former Citation: | Not reported |

ICIS:

| | |
|---|---|
| Enforcement Action ID: | NY000A0000355180076700309 |
| FRS ID: | 110004461911 |
| Action Name: | BROADWAY CLEANERS 36119R120900309 |
| Facility Name: | BROADWAY CLEANERS |
| Facility Address: | 479 SOUTH BROADWAY<br>YONKERS, NY 107053249 |
| Enforcement Action Type: | Notice of Violation |
| Facility County: | WESTCHESTER |
| Program System Acronym: | AIR |
| Enforcement Action Forum Desc: | Administrative - Informal |
| EA Type Code: | NOV |
| Facility SIC Code: | 7216 |
| Federal Facility ID: | Not reported |
| Latitude in Decimal Degrees: | 40.917398 |
| Longitude in Decimal Degrees: | -73.896698 |
| Permit Type Desc: | Not reported |

**BROADWAY CLEANERS (Continued)** **1004757575**

Program System Acronym: NY0000003551800767
Facility NAICS Code: 812320
Tribal Land Code: Not reported

US AIRS MINOR:
Envid: 1004757575
Region Code: 02
Programmatic ID: AIR NY0000003551800767
Facility Registry ID: 110004461911
D and B Number: Not reported
Primary SIC Code: 7216
NAICS Code: 812320
Default Air Classification Code: MIN
Facility Type of Ownership Code: POF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:
Region Code: 02
Programmatic ID: AIR NY0000003551800767
Facility Registry ID: 110004461911
Air Operating Status Code: OPR
Default Air Classification Code: MIN
Air Program: MACT Standards (40 CFR Part 63)
Activity Date: 2005-09-12 00:00:00
Activity Status Date: 2005-09-12 00:00:00
Activity Group: Enforcement Action
Activity Type: Administrative - Informal
Activity Status: Achieved

NY MANIFEST:
EPA ID: NYD986943413
Country: USA
Name: Broadway Cleaners
Address: 479 S BROADWAY
Address 2: Not reported
City,State,Zip: YONKERS, NY 10705
Zip 4: Not reported
Location Address 1: 479 SOUTH BROADWAY AVENUE
Location Address 2: Not reported
Location City,State,Zip: YONKERS, NY 10705
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Broadway Cleaners
Mailing Contact: Broadway Cleaners
Mailing Address 1: 479 SOUTH BROADWAY AVENUE
Mailing Address 2: Not reported
Mailing City,State,Zip: YONKERS, NY 10705
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 9144230908

**BROADWAY CLEANERS (Continued)** **1004757575**

Manifest Data:

| | |
|---|---|
| Document ID: | NYC1812159 |
| Manifest Status: | Not reported |
| Trans1 State ID: | GP2351NY |
| Year: | 1992 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 08/12/1992 |
| Trans1 Recv Date: | 08/12/1992 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 08/12/1992 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986943413 |
| Trans1 EPA ID: | ILD051060408 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00195 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | NYC6106151 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYRCR2436 |
| Year: | 2000 |
| Trans2 State ID: | NJT162VW |
| Generator Ship Date: | 03/28/2000 |
| Trans1 Recv Date: | 03/28/2000 |

**BROADWAY CLEANERS (Continued)** **1004757575**

| | |
|---|---|
| Trans2 Recv Date: | 03/30/2000 |
| TSD Site Recv Date: | 04/01/2000 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986943413 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | SCR000074591 |
| TSDF ID 1: | OHD980587364 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00390 |
| Units: | Pounds |
| Number of Containers: | 002 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC6437158 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYCR2436 |
| Year: | 2001 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 09/14/2001 |
| Trans1 Recv Date: | 09/14/2001 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 09/19/2001 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986943413 |
| Trans1 EPA ID: | SCR000075150 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | OHD980587364 |

**BROADWAY CLEANERS (Continued)** **1004757575**

| | |
|---|---|
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00140 |
| Units: | Pounds |
| Number of Containers: | 002 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | NYC2432979 |
| Manifest Status: | Not reported |
| Trans1 State ID: | GP2381NY |
| Year: | 1993 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 07/13/1993 |
| Trans1 Recv Date: | 07/13/1993 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 07/13/1993 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986943413 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |

**BROADWAY CLEANERS (Continued)** **1004757575**

| | |
|---|---|
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00070 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |

| | |
|---|---|
| Document ID: | NYC6746681 |
| Manifest Status: | Not reported |
| Trans1 State ID: | Not reported |
| Year: | 2002 |
| Trans2 State ID: | NJ044 |
| Generator Ship Date: | 08/22/2002 |
| Trans1 Recv Date: | 08/22/2002 |
| Trans2 Recv Date: | 08/28/2002 |
| TSD Site Recv Date: | 08/29/2002 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986943413 |
| Trans1 EPA ID: | SCR000075150 |
| Trans2 EPA ID: | NJD071629976 |
| TSDF ID 1: | OHD980587364 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, |

**BROADWAY CLEANERS (Continued)** **1004757575**

| | |
|---|---|
| | Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00060 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | CTF0642014 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYCR2436 |
| Year: | 1997 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 11/21/1997 |
| Trans1 Recv Date: | 11/21/1997 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 11/26/1997 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986943413 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | CTD001156009 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |

**BROADWAY CLEANERS (Continued)** **1004757575**

| | |
|---|---|
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00070 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Burn |
| Specific Gravity: | 01.00 |
| | |
| Document ID: | NYC3664113 |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYAV4489 |
| Year: | 1995 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 08/31/1995 |
| Trans1 Recv Date: | 08/31/1995 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 08/31/1995 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986943413 |
| Trans1 EPA ID: | ILD984908202 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NYD000708172 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00070 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Metal drums, barrels, kegs |
| Handling Method: | Burn |

**BROADWAY CLEANERS (Continued)** **1004757575**

| | |
|---|---|
| Specific Gravity: | 01.00 |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | TXR000050930 |
| Year: | 2018 |
| Trans2 State ID: | NJD071629976 |
| Generator Ship Date: | 09/15/2006 |
| Trans1 Recv Date: | 09/15/2006 |
| Trans2 Recv Date: | 09/25/2006 |
| TSD Site Recv Date: | 09/26/2006 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986943413 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | OHD980587364 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000811434JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H020 |
| Waste Code a: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code b: | Tetrachloroethylene |
| Waste Code c: | Trichlorethylene |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 100 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Recycle |
| Specific Gravity: | 1 |

**BROADWAY CLEANERS (Continued)** **1004757575**

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | TXR000050930 |
| Year: | 2018 |
| Trans2 State ID: | NJD071629976 |
| Generator Ship Date: | 09/15/2006 |
| Trans1 Recv Date: | 09/15/2006 |
| Trans2 Recv Date: | 09/25/2006 |
| TSD Site Recv Date: | 09/26/2006 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986943413 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | OHD980587364 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 000811434JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H020 |
| Waste Code a: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code b: | Chromium |
| Waste Code c: | Tetrachloroethylene |
| Waste Code e: | Trichlorethylene |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 150 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Recycle |
| Specific Gravity: | 1 |

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |

**BROADWAY CLEANERS (Continued)** **1004757575**

| | |
|---|---|
| Trans1 State ID: | TXR000050930 |
| Year: | 2018 |
| Trans2 State ID: | NJD000692061 |
| Generator Ship Date: | 09/02/2008 |
| Trans1 Recv Date: | 09/02/2008 |
| Trans2 Recv Date: | 09/12/2008 |
| TSD Site Recv Date: | 09/15/2008 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986943413 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | OHD980587364 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 001319249SKS |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H020 |
| Waste Code a: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code b: | Tetrachloroethylene |
| Waste Code c: | Trichlorethylene |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 100 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Recycle |
| Specific Gravity: | 1 |
| | |
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | TXR000050930 |
| Year: | 2018 |

**BROADWAY CLEANERS (Continued)** **1004757575**

| | |
|---|---|
| Trans2 State ID: | NJD000692061 |
| Generator Ship Date: | 09/02/2008 |
| Trans1 Recv Date: | 09/02/2008 |
| Trans2 Recv Date: | 09/12/2008 |
| TSD Site Recv Date: | 09/15/2008 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYD986943413 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | OHD980587364 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 001319249SKS |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | N |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H020 |
| Waste Code a: | The Following Spent Halogenated Solvents: Tetrachloroethylene, Methylene Chloride, Trichloroethylene, 1,1,1-Trichloroethane, Chlorobenzene, 1,1,2-Trichloro-1,2,2-Trifluoroethane, Ortho-Dichlorobenzene, Trichlorofluoromethane, And 1,1,2, Trichloroethane; All Spent Solvent Mixtures/Blends Containing, Before Use, A Total Of Ten Percent Or More (By Volume) Of One Or More Of The Above Halogenated Solvents Or Those Solvents Listed In F001, F004, And F005; And Still Bottoms From The Recovery Of These Spent Solvents And Spent Solvent Mixtures. |
| Waste Code b: | Chromium |
| Waste Code c: | Tetrachloroethylene |
| Waste Code e: | Trichlorethylene |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 150 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Recycle |
| Specific Gravity: | 1 |

Click this hyperlink while viewing on your computer to access
54 additional NY MANIFEST: record(s) in the EDR Site Report.

**AL249** **CON EDISON TRANSFORMER MANHOLE** **RCRA NonGen / NLR** **1014398998**
**SSW** **ABEEL ST & VALENTINE AVE** **NY MANIFEST** **NYP004213732**
**1/8-1/4** **YONKERS, NY 10705** **NJ MANIFEST**
**0.243 mi.**
**1284 ft.** **Site 1 of 2 in cluster AL**

**Relative:**
**Higher**

**Actual:**
**108 ft.**

RCRA Listings:

| | | |
|---|---|---|
| Date Form Received by Agency: | | 20100918 |
| Handler Name: | | Con Edison Transformer Manhole |
| Handler Address: | | Abeel St & Valentine Ave |
| Handler City,State,Zip: | | YONKERS, NY 10705 |
| EPA ID: | | NYP004213732 |
| Contact Name: | | GINO FRABASILE |
| Contact Address: | | Not reported |
| Contact City,State,Zip: | | Not reported |
| Contact Telephone: | | 914-925-6219 |
| Contact Fax: | | Not reported |
| Contact Email: | | Not reported |
| Contact Title: | | Not reported |
| EPA Region: | | 02 |
| Land Type: | | Private |
| Federal Waste Generator Description: | | Not a generator, verified |
| Non-Notifier: | | Not reported |
| Biennial Report Cycle: | | Not reported |
| Accessibility: | | Not reported |
| Active Site Indicator: | | Not reported |
| State District Owner: | | Ny |
| State District: | | NYSDEC R2 |
| Mailing Address: | | 4 IRVING PL, RM 828 |
| Mailing City,State,Zip: | | NEW YORK, NY 10003 |
| Owner Name: | Not reported | |
| Owner Type: | | Not reported |
| Operator Name: | Not reported | |
| Operator Type: | | Not reported |
| Short-Term Generator Activity: | | No |
| Importer Activity: | | No |
| Mixed Waste Generator: | | No |
| Transporter Activity: | | No |
| Transfer Facility Activity: | | No |
| Recycler Activity with Storage: | | No |
| Small Quantity On-Site Burner Exemption: | | No |
| Smelting Melting and Refining Furnace Exemption: | | No |
| Underground Injection Control: | | No |
| Off-Site Waste Receipt: | | No |
| Universal Waste Indicator: | | No |
| Universal Waste Destination Facility: | | No |
| Federal Universal Waste: | | No |
| Active Site State-Reg Handler: | | --- |
| Federal Facility Indicator: | | Not reported |
| Hazardous Secondary Material Indicator: | | N |
| Sub-Part K Indicator: | | Not reported |
| 2018 GPRA Permit Baseline: | | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | | No |
| Subject to Corrective Action Universe: | | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | | No |
| Corrective Action Priority Ranking: | | No NCAPS ranking |
| Environmental Control Indicator: | | No |
| Institutional Control Indicator: | | No |

**CON EDISON TRANSFORMER MANHOLE (Continued)** **1014398998**

| | |
|---|---|
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150414 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20100818 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20100918 |
| Handler Name: CON EDISON TRANSFORMER MANHOLE | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | Yes |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

List of NAICS Codes and Descriptions:

| | |
|---|---|
| NAICS Codes: | No NAICS Codes Found |

Facility Has Received Notices of Violations:

| | |
|---|---|
| Violations: | No Violations Found |

Evaluation Action Summary:

| | |
|---|---|
| Evaluations: | No Evaluations Found |

**CON EDISON TRANSFORMER MANHOLE (Continued)** **1014398998**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004213732 |
| Country: | USA |
| Name: | Consolidated Edison |
| Address: | ABEEL ST & VALENTINE AVE |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | TM3945 - ABEEL - VALENTE AVE |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Consolidated Edison |
| Mailing Contact: | Thomas Teeling |
| Mailing Address 1: | 4 IRVING PL RM 828 |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 2124603770 |

Manifest Data:

| | |
|---|---|
| Document ID: | Not reported |
| Manifest Status: | Not reported |
| Trans1 State ID: | NYD006982359 |
| Year: | 2018 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 08/18/2010 |
| Trans1 Recv Date: | 08/18/2010 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 08/19/2010 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYP004213732 |
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 001086144GBF |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | Y |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |

**CON EDISON TRANSFORMER MANHOLE (Continued)** **1014398998**

| | |
|---|---|
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 600 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

NJ MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004213732 |
| Name: | CON EDISON TRANSFORMER MANHOLE |
| Address: | ABEEL ST & VALENTINE AVE |
| City,State,Zip: | YONKERS, NY 10705 |
| County: | Not reported |
| Mailing Address: | 4 IRVING PL, RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Telephone: | Not reported |
| Emergency Telephone: | Not reported |
| Contact: | GINO FRABASILE |
| Comments: | Not reported |
| SIC Code: | Not reported |
| County: | NY119 |
| Municipal: | Not reported |
| Previous EPAID: | Not reported |
| Generator Flag: | Not reported |
| Transporter Flag: | Not reported |
| TSDF Flag: | Not reported |
| Name Change: | Not reported |
| Date Change: | Not reported |

Manifest Data:

| | |
|---|---|
| EPA ID: | NYP004213732 |
| Manifest Number: | 001086144GBF |
| Date Shipped: | 08/18/2010 |
| TSDF EPA ID: | NJD002200046 |
| Transporter EPA ID: | NYD006982359 |
| Transporter 2 EPA ID: | Not reported |
| Transporter 3 EPA ID: | Not reported |
| Transporter 4 EPA ID: | Not reported |
| Transporter 5 EPA ID: | Not reported |
| Transporter 6 EPA ID: | Not reported |
| Transporter 7 EPA ID: | Not reported |
| Transporter 8 EPA ID: | Not reported |
| Transporter 9 EPA ID: | Not reported |
| Transporter 10 EPA ID: | Not reported |
| Date Trans1 Transported Waste: | 08/18/2010 |
| Date Trans2 Transported Waste: | Not reported |

**CON EDISON TRANSFORMER MANHOLE (Continued)** **1014398998**

| | |
|---|---|
| Date Trans3 Transported Waste: | Not reported |
| Date Trans4 Transported Waste: | Not reported |
| Date Trans5 Transported Waste: | Not reported |
| Date Trans6 Transported Waste: | Not reported |
| Date Trans7 Transported Waste: | Not reported |
| Date Trans8 Transported Waste: | Not reported |
| Date Trans9 Transported Waste: | Not reported |
| Date Trans10 Transported Waste: | Not reported |
| Date TSDF Received Waste: | 08/19/2010 |
| TSDF EPA Facility Name: | Not reported |
| QTY Units: | Not reported |
| Transporter SEQ ID: | Not reported |
| Transporter-1 Date: | Not reported |
| Waste SEQ ID: | Not reported |
| Waste Type Code 2: | Not reported |
| Waste Type Code 3: | Not reported |
| Waste Type Code 4: | Not reported |
| Waste Type Code 5: | Not reported |
| Waste Type Code 6: | Not reported |
| Date Accepted: | Not reported |
| Manifest Discrepancy Type: | Not reported |
| Data Entry Number: | Not reported |
| Was Load Rejected: | N |
| Reason Load Was Rejected: | Not reported |

Waste:

| | |
|---|---|
| Manifest Year: | Not reported |
| Waste Code: | D008 |
| Hand Code: | H111 |
| Quantity: | 600 |
| Unit: | P |

---

**AL250** **CON EDISON** **NY MANIFEST** **S117058249**
**SSW** **VALENTINE LA & ABEEL ST** **N/A**
**1/8-1/4** **YONKERS, NY 10701**
**0.243 mi.**
**1284 ft.** **Site 2 of 2 in cluster AL**

**Relative:**
**Higher**

**Actual:**
**108 ft.**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYP004499182 |
| Country: | USA |
| Name: | Con Edison |
| Address: | VALENTINE LA & ABEEL ST |
| Address 2: | SB 691 |
| City,State,Zip: | YONKERS, NY 10701 |
| Zip 4: | Not reported |
| Location Address 1: | VALENTINE LA & ABEEL ST |
| Location Address 2: | SB 691 |
| Location City,State,Zip: | YONKERS, NY 10701 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Con Edison |
| Mailing Contact: | Tom Teeling |

**CON EDISON (Continued)** **S117058249**

Mailing Address 1: 4 IRVING PLACE - 15TH FLOOR
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 04/13/2014
Trans1 Recv Date: 04/13/2014
Trans2 Recv Date: Not reported
TSD Site Recv Date: 04/15/2014
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004499182
Trans1 EPA ID: Not reported
Trans2 EPA ID: Not reported
TSDF ID 1: NJD002200046
TSDF ID 2: Not reported
Manifest Tracking Number: 012770755JJK
Import Indicator: N
Export Indicator: N
Discr Quantity Indicator: N
Discr Type Indicator: N
Discr Residue Indicator: N
Discr Partial Reject Indicator: N
Discr Full Reject Indicator: N
Manifest Ref Number: Not reported
Alt Facility RCRA ID: Not reported
Alt Facility Sign Date: Not reported
MGMT Method Type Code: H110
Waste Code a: Lead
Waste Code b: Not reported
Waste Code c: Not reported
Waste Code e: Not reported
Waste Code f: Not reported
Waste Code g: Not reported
Waste Code 1: Not reported
Waste Code 2: Not reported
Waste Code 3: Not reported
Waste Code 4: Not reported
Waste Code 5: Not reported
Waste Code 6: Not reported
Quantity: 100
Units: Pounds
Number of Containers: 1
Container Type: Cargo tanks (tank trucks)
Handling Method: Treat
Specific Gravity: 1

**251**
**SW**
**1/8-1/4**
**0.246 mi.**
**1298 ft.**

**PETNUCH RESIDENCE**
**445 HAWTHORNE AVE**
**YONKERS, NY**

**NY LTANKS** **S102674414**
**N/A**

**Relative:**
**Higher**

**Actual:**
**71 ft.**

LTANKS:

| | |
|---|---|
| Name: | PETNUCH RESIDENCE |
| Address: | 445 HAWTHORNE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9416480 / 2005-02-12 |
| Facility ID: | 9416480 |
| Site ID: | 252880 |
| Spill Date: | 1995-03-21 |
| Spill Cause: | Tank Overfill |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1995-03-21 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Citizen |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1995-03-30 |
| Spill Record Last Update: | 2005-02-12 |
| Spiller Name: | Not reported |
| Spiller Company: | SULLIVAN & SONS |
| Spiller Address: | 547 YONKERS AVE. |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 207148 |
| Latitude: | 40.9173010 |
| Longitude: | -73.9048930 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY 2/12/2005 surface spill from overfill running to neighbors yard and causeing odors;assume neigbor required cleanup-close |
| Remarks: | NIEGHBOR AT 449 HAWTHORNE AVE. WAS GETTING DELIVERY POSSIBLE OVERFILL HAS RUN INTO MRS. PETNUCH PROPERTY COMPLAINING OF FUMES REFERED TO W.C.H.D. |

All Materials:

| | |
|---|---|
| Site ID: | 252880 |
| Operable Unit ID: | 1013669 |
| Operable Unit: | 01 |
| Material ID: | 371634 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |

**PETNUCH RESIDENCE (Continued)** **S102674414**

Units: L
Recovered: .00
Oxygenate: Not reported

---

**AM252** **RENEE BURKE MANOR** **NY UST** **U004177198**
**NNE** **15 HAMILTON AVENUE** **N/A**
**1/8-1/4** **YONKERS, NY 10705**
**0.249 mi.**
**1314 ft.** **Site 1 of 3 in cluster AM**

**Relative:**
**Higher**

**Actual:**
**82 ft.**

WESTCHESTER CO. UST:

| | |
|---|---|
| Name: | RENEE BURKE MANOR |
| Address: | 15 HAMILTON AVENUE |
| City,State,Zip: | YONKERS, NY 10705 |
| Id/Status: | 3-411655 / Active |
| Operator Name: | Carlos Delgado |
| Owner Name: | Hamilton Associates |
| Owner Street: | 6 Executive Plaza, Suite 200 |
| Owner Address2: | Not reported |
| Owner City: | Yonkers |
| Owner State: | NY |
| Owner Zipcode: | 10701 |
| GDS Number: | Not reported |
| Tank Number: | 1 |
| Status: | 1. In-Service |
| Capacity: | 6000 |
| Product Stored: | 0001. #2 Fuel Oil |
| Product Stored Percent: | Not reported |
| Tank Leak Detection: | 0. None |
| Date Installation: | 06/01/1984 |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 5. Underground including vaulted with no access for inspection |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Secondary Containment: | 7. Excavation/trench Liner system |
| Piping Location: | 2. Underground/on Ground |
| Piping Type: | 2. Galvanized Steel |
| Piping External Protection: | 0. None |
| Overfill Prevention: | 0. None |
| Piping Secondary Containment: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

---

**AM253** **APT BUILDING - PBS TTF** **NY LTANKS** **S108983075**
**NNE** **15 HAMILTON AVE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.249 mi.**
**1314 ft.** **Site 2 of 3 in cluster AM**

**Relative:**
**Higher**

**Actual:**
**82 ft.**

LTANKS:

| | |
|---|---|
| Name: | APT BUILDING - PBS TTF |
| Address: | 15 HAMILTON AVE |
| City,State,Zip: | YONKERS, NY |

**APT BUILDING - PBS TTF (Continued)** **S108983075**

| | |
|---|---|
| Spill Number/Closed Date: | 0710931 / 2008-03-18 |
| Facility ID: | 0710931 |
| Site ID: | 392311 |
| Spill Date: | 2008-01-15 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | JACKSON |
| Reported to Dept: | 2008-01-15 |
| CID: | 408 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | Not reported |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2008-01-15 |
| Spill Record Last Update: | 2024-05-31 |
| Spiller Name: | ISAAC MUNGRA |
| Spiller Company: | APT. BUILDING |
| Spiller Address: | 15 HAMILTON AVE |
| Spiller County: | 001 |
| Spiller Contact: | ISAAC MUNGRA |
| Spiller Phone: | (646) 879-6703 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 341908 |
| Latitude: | 40.9229517 |
| Longitude: | -73.8980086 |
| DEC Memo: | 03/18/08 Danielle Jackson reported that the tank was repaired,retested and passed. NFA TG |
| Remarks: | DRY LEAK; |

All TTF:

| | |
|---|---|
| Facility ID: | 0710931 |
| Spill Number: | 0710931 |
| Spill Tank Test: | 2384487 |
| Site ID: | 392311 |
| Tank Number: | Not reported |
| Tank Size: | 6000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | True |
| Cause: | 99 |
| Source: | 01 |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

**APT BUILDING - PBS TTF (Continued)** **S108983075**

| | |
|---|---|
| Site ID: | 392311 |
| Operable Unit ID: | 1149328 |
| Operable Unit: | 01 |
| Material ID: | 2139849 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**AM254** **15 HAMILTON ASSOC** **NY LTANKS** **S118462534**
**NNE** **15 HAMILTON AVE** **N/A**
**1/8-1/4** **YONKERS, NY**
**0.249 mi.**
**1314 ft.** **Site 3 of 3 in cluster AM**

**Relative:** **Higher**
**Actual:** **82 ft.**

LTANKS:

| | |
|---|---|
| Name: | 15 HAMILTON ASSOC |
| Address: | 15 HAMILTON AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1509950 / 2016-02-18 |
| Facility ID: | 1509950 |
| Site ID: | 520595 |
| Spill Date: | 2016-01-06 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | RDBENDEL |
| Referred To: | Not reported |
| Reported to Dept: | 2016-01-06 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2016-01-06 |
| Spill Record Last Update: | 2016-02-18 |
| Spiller Name: | CHACHA |
| Spiller Company: | 15 HAMILTON ASSOC. APT |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | CHACHA |
| Spiller Phone: | (914) 969-3503 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 341908 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 1/6/16 - Possibility a leak in the fuel lines. Refer to Westchester |

**15 HAMILTON ASSOC (Continued)** **S118462534**

| | |
|---|---|
| Remarks: | County DOH for PBS. KAB 2-18-16 repaired retested NFA RDB 6000 gal ust |

All Materials:

| | |
|---|---|
| Site ID: | 520595 |
| Operable Unit ID: | 1269637 |
| Operable Unit: | 01 |
| Material ID: | 2273702 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**AD255** **CON EDISON MANHOLE** **RCRA NonGen / NLR** **1014398577**
**East** **MCLEAN AVE & ROMAINE ST** **NY MANIFEST** **NYP004209324**
**1/8-1/4** **YONKERS, NY 10705**
**0.250 mi.**
**1318 ft.** **Site 6 of 6 in cluster AD**

**Relative:**
**Higher**

**Actual:**
**78 ft.**

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20100722 |
| Handler Name: | Con Edison Manhole |
| Handler Address: | Mclean Ave & Romaine St |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYP004209324 |
| Contact Name: | STEVEN MARTIS |
| Contact Address: | Not reported |
| Contact City,State,Zip: | Not reported |
| Contact Telephone: | 917-416-5423 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | Not reported |
| EPA Region: | 02 |
| Land Type: | Private |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |
| State District: | NYSDEC R2 |
| Mailing Address: | 4 IRVING PL, RM 828 |
| Mailing City,State,Zip: | NEW YORK, NY 10003 |
| Owner Name: | Not reported |
| Owner Type: | Not reported |
| Operator Name: | Not reported |
| Operator Type: | Not reported |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |

**CON EDISON MANHOLE (Continued)** **1014398577**

| | |
|---|---|
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150414 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Historic Generators:

| | |
|---|---|
| Receive Date: | 20100622 |
| Handler Name: CON EDISON | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |
| Spent Lead Acid Battery Importer: | No |
| Spent Lead Acid Battery Exporter: | No |
| Current Record: | No |
| Non Storage Recycler Activity: | Not reported |
| Electronic Manifest Broker: | Not reported |

| | |
|---|---|
| Receive Date: | 20100722 |
| Handler Name: CON EDISON MANHOLE | |
| Federal Waste Generator Description: | Not a generator, verified |
| State District Owner: | Ny |
| Large Quantity Handler of Universal Waste: | No |
| Recognized Trader Importer: | No |
| Recognized Trader Exporter: | No |

**CON EDISON MANHOLE (Continued)** **1014398577**

Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

NY MANIFEST:
EPA ID: NYP004209324
Country: USA
Name: Consolidated Edison
Address: MCLEAN AVE & ROMAINE ST
Address 2: 50 FT W OF ROMAINE ST
City,State,Zip: YONKERS, NY 10705
Zip 4: Not reported
Location Address 1: MH69 - MCLEAN AVE 50’ W/O ROMAINE AVE
Location Address 2: Not reported
Location City,State,Zip: YONKERS, NY
Location Zip 4: Not reported
Facility Status: Not reported
Total Tanks: Not reported
Code: BP

Mailing:
Mailing Name: Consolidated Edison
Mailing Contact: Thomas Teeling
Mailing Address 1: 4 IRVING PL RM 828
Mailing Address 2: Not reported
Mailing City,State,Zip: NEW YORK, NY 10003
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2124603770

Manifest Data:
Document ID: Not reported
Manifest Status: Not reported
Trans1 State ID: NYD006982359
Year: 2018
Trans2 State ID: Not reported
Generator Ship Date: 06/22/2010
Trans1 Recv Date: 06/22/2010
Trans2 Recv Date: Not reported
TSD Site Recv Date: 06/23/2010
Part A Recv Date: Not reported
Part B Recv Date: Not reported
Generator EPA ID: NYP004209324

**CON EDISON MANHOLE (Continued)** **1014398577**

| | |
|---|---|
| Trans1 EPA ID: | Not reported |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | NJD002200046 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | 007020938JJK |
| Import Indicator: | N |
| Export Indicator: | N |
| Discr Quantity Indicator: | N |
| Discr Type Indicator: | Y |
| Discr Residue Indicator: | N |
| Discr Partial Reject Indicator: | N |
| Discr Full Reject Indicator: | N |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | H111 |
| Waste Code a: | Lead |
| Waste Code b: | Not reported |
| Waste Code c: | Not reported |
| Waste Code e: | Not reported |
| Waste Code f: | Not reported |
| Waste Code g: | Not reported |
| Waste Code 1: | Not reported |
| Waste Code 2: | Not reported |
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 200 |
| Units: | Pounds |
| Number of Containers: | 1 |
| Container Type: | Cargo tanks (tank trucks) |
| Handling Method: | Treat |
| Specific Gravity: | 1 |

---

**AG256** **APARTMENT** **NY LTANKS** **S108639470**
**SE** **70 RADFORD STREET** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.256 mi.**
**1353 ft.** **Site 12 of 12 in cluster AG**

**Relative:** **Higher**

**Actual:** **81 ft.**

LTANKS:

| | |
|---|---|
| Name: | APARTMENT |
| Address: | 70 RADFORD STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0701095 / 2010-04-09 |
| Facility ID: | 0701095 |
| Site ID: | 380587 |
| Spill Date: | 2007-04-26 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jkomara |
| Referred To: | WCDOH |
| Reported to Dept: | 2007-04-26 |

**APARTMENT (Continued)** **S108639470**

| | |
|---|---|
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | Not reported |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2007-04-27 |
| Spill Record Last Update: | 2010-04-09 |
| Spiller Name: | PAT VICARIO |
| Spiller Company: | APART |
| Spiller Address: | 70 RADFORD STREET |
| Spiller County: | 001 |
| Spiller Contact: | PAT VICARIO |
| Spiller Phone: | (914) 330-5969 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 330028 |
| Latitude: | 40.9170917 |
| Longitude: | -73.8961585 |
| DEC Memo: | PBS 3-172162 4/9/10 As per WCHD Tank removed 10/5/07, no contamination NFA JO'M |
| Remarks: | DRY LEAK |

All TTF:

| | |
|---|---|
| Facility ID: | 0701095 |
| Spill Number: | 0701095 |
| Spill Tank Test: | 1550795 |
| Site ID: | 380587 |
| Tank Number: | 1 |
| Tank Size: | 1500 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 380587 |
| Operable Unit ID: | 1138065 |
| Operable Unit: | 01 |
| Material ID: | 2128036 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

**AN257** **252 HAWTHORNE AVENUE, LLC** **UST FINDER RELEASE** **1029067389**
**NNW** **252 HAWTHORNE AVENUE** **N/A**
**1/4-1/2** **YONKERS, NY 0**
**0.264 mi.**
**1393 ft.** **Site 1 of 2 in cluster AN**

**Relative:** **Lower**
**Actual:** **35 ft.**

UST FINDER RELEASE:

| | |
|---|---|
| Object ID: | 258801 |
| Facility ID: | NY234201 |
| Lust ID: | NY110933 |
| Name: | 252 HAWTHORNE AVENUE, LLC |
| Address: | 252 HAWTHORNE AVENUE |
| City,State,Zip: | YONKERS, NY 0 |
| Address Match Type: | Not reported |
| Reported Date: | 2002/02/15 15:59:59+00 |
| Status: | No Further Action |
| Substance: | Not reported |
| Population within 1500ft: | 8252 |
| Domestic Wells within 1500ft: | 5 |
| Land Use: | Developed, High Intensity |
| Within SPA: | No |
| SPA PWS Facility ID: | Not reported |
| SPA Water Type: | Not reported |
| SPA Facility Type: | Not reported |
| SPA HUC12: | Not reported |
| Within WHPA: | No |
| WHPA PWS Facility ID: | Not reported |
| WHPA Water Type: | Not reported |
| WHPA Facility Type: | Not reported |
| WHPA HUC12: | Not reported |
| Within 100yr Floodplain: | No |
| Tribe: | Not reported |
| EPA Region: | 2 |
| NFA Letter 1: | Not reported |
| NFA Letter 2: | Not reported |
| NFA Letter 3: | Not reported |
| NFA Letter 4: | Not reported |
| Closed With Residual Contaminate: | Not reported |
| Coordinate Source: | State |
| X Coord: | -73.9025 |
| Y Coord: | 40.92386 |
| Latitude: | 40.9238599999999 |
| Longitude: | -73.9025 |

---

**AN258** **252 HAWTHORNE AVENUE, LLC** **NY LTANKS** **S105995194**
**NNW** **252 HAWTHORNE AVENUE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.264 mi.**
**1393 ft.** **Site 2 of 2 in cluster AN**

**Relative:** **Lower**
**Actual:** **35 ft.**

LTANKS:

| | |
|---|---|
| Name: | 252 HAWTHORNE AVENUE, LLC |
| Address: | 252 HAWTHORNE AVENUE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0110933 / 2002-04-11 |
| Facility ID: | 0110933 |
| Site ID: | 289223 |
| Spill Date: | 2002-02-15 |
| Spill Cause: | Tank Failure |
| Spill Source: | Commercial/Industrial |

**252 HAWTHORNE AVENUE, LLC (Continued)** **S105995194**

| | |
|---|---|
| Spill Class: | B3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | WCHD |
| Referred To: | Westchester Cnty Health Dept |
| Reported to Dept: | 2002-02-15 |
| CID: | 266 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | True |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2002-02-15 |
| Spill Record Last Update: | 2002-06-03 |
| Spiller Name: | BOB FRIEDLAND |
| Spiller Company: | 252 HAWTHORNE AVENUE, LLC |
| Spiller Address: | 656 CENTRAL PARK AVENUE |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 234201 |
| Latitude: | 40.9238632 |
| Longitude: | -73.9025044 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was |
| Remarks: | WCDOH REPORT FROM MADISON REVIEWED BY CHRIS LALAK OF WCHD. NFA SOIL CONTAMINATION FOUND DURING REMOVAL OF AN OLD 2000 GALLON UNDERGROUND STORAGE TANK. NO GROUNDWATER ENCOUNTERED. APPROXIMATELY 40 YARDS OF SOIL TO BE REMOVED. SAMPLES TAKEN. |

All Materials:

| | |
|---|---|
| Site ID: | 289223 |
| Operable Unit ID: | 849419 |
| Operable Unit: | 01 |
| Material ID: | 528536 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**AO259** **YONKERS STP** **NY LTANKS** **S102154467**
**North** **LUDLOW STREET** **NY Spills** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.270 mi.**
**1423 ft.** **Site 1 of 3 in cluster AO**

**Relative:** **Lower**

**Actual:** **42 ft.**

LTANKS:

| | |
|---|---|
| Name: | YONKERS STP |
| Address: | LUDLOW STREET |
| City,State,Zip: | YONKERS, NY |

**YONKERS STP (Continued)** **S102154467**

| | |
|---|---|
| Spill Number/Closed Date: | 9308186 / 2005-02-12 |
| Facility ID: | 9308186 |
| Site ID: | 326720 |
| Spill Date: | 1993-09-29 |
| Spill Cause: | Tank Overfill |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | B3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1993-10-06 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2003-12-02 |
| Spill Record Last Update: | 2005-02-12 |
| Spiller Name: | Not reported |
| Spiller Company: | WESTCHESTER CO. |
| Spiller Address: | Not reported |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 263183 |
| Latitude: | 40.9238949 |
| Longitude: | -73.9008700 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY 2/12/2005 found contaminated soil (they think from overfills) during tank removal; report says they will remove and stockpile--this is not a sensitive area--close administratively |
| Remarks: | DISCOVERED CONTAMINATION DURING TANK PULL WILL STOCKPILE |

All Materials:

| | |
|---|---|
| Site ID: | 326720 |
| Operable Unit ID: | 989702 |
| Operable Unit: | 01 |
| Material ID: | 394422 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | Not reported |
| Recovered: | .00 |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | YONKERS TREATMENT PLANT |
| Address: | LUDLOW STREET |

**YONKERS STP (Continued)** **S102154467**

| | |
|---|---|
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9303315 / 1994-12-08 |
| Facility ID: | 9303315 |
| Facility Type: | ER |
| DER Facility ID: | 263183 |
| Site ID: | 326719 |
| DEC Region: | 3 |
| Spill Cause: | Human Error |
| Spill Class: | D3 |
| SWIS: | 6018 |
| Spill Date: | 1993-06-14 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1993-06-14 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Tank Truck |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 1994-12-08 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1993-06-30 |
| Spill Record Last Update: | 1994-12-08 |
| Spiller Name: | Not reported |
| Spiller Company: | CASTLE |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Latitude: | 40.9238949 |
| Longitude: | -73.9008700 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | SPILL ON PAVEMENT TO STORM DRAIN TO HUDSON 15 - 20 GAL. IN RIVER SORBENTS APPLIED USCG NOTIFIED |

All Materials:

| | |
|---|---|
| Site ID: | 326719 |
| Operable Unit ID: | 985213 |
| Operable Unit: | 01 |
| Material ID: | 396893 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 50.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

**AP260** **CABREA** **NY LTANKS** **S102674904**
**NNW** **39 PIER STREET** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.271 mi.**
**1429 ft.** **Site 1 of 2 in cluster AP**

**Relative:** **Lower**

**Actual:** **25 ft.**

LTANKS:

| | |
|---|---|
| Name: | CABREA |
| Address: | 39 PIER STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 8809475 / 1989-03-09 |
| Facility ID: | 8809475 |
| Site ID: | 89634 |
| Spill Date: | 1989-03-08 |
| Spill Cause: | Tank Overfill |
| Spill Source: | Tank Truck |
| Spill Class: | Not reported |
| Cleanup Ceased: | 1989-03-09 |
| SWIS: | 6018 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1989-03-08 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Citizen |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1989-03-15 |
| Spill Record Last Update: | 1989-05-11 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 81867 |
| Latitude: | 40.9234640 |
| Longitude: | -73.9031523 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was T. GHIOSAY / / : SPILL CLEANED UP BY SPILLER N.F.A. |
| Remarks: | SPILL WAS ON SOIL, NO CLEANUP AS YET. MR. BLSTER TO HAVE MR. CABREA TO GIVE ME A CALL TO GET TO PROBLEM. |

All Materials:

| | |
|---|---|
| Site ID: | 89634 |
| Operable Unit ID: | 925723 |
| Operable Unit: | 01 |
| Material ID: | 454206 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 10.00 |
| Units: | G |
| Recovered: | .00 |

**CABREA (Continued)** **S102674904**

Oxygenate: Not reported

---

**AH261** **SPILL NUMBER 0007654** **NY LTANKS** **S104782399**
**ENE** **340 SOUTH BROADWAY** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.271 mi.**
**1431 ft.** **Site 4 of 4 in cluster AH**

**Relative:** **Higher**

**Actual:** **88 ft.**

LTANKS:

| | |
|---|---|
| Name: | SPILL NUMBER 0007654 |
| Address: | 340 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0007654 / 2001-04-13 |
| Facility ID: | 0007654 |
| Site ID: | 230529 |
| Spill Date: | 2000-09-29 |
| Spill Cause: | Tank Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | B4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2000-09-29 |
| CID: | 396 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2000-09-29 |
| Spill Record Last Update: | 2001-04-23 |
| Spiller Name: | Not reported |
| Spiller Company: | SAME |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | MOSHEN VARGAR-OWNER |
| Spiller Phone: | (914) 328-6061 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 189982 |
| Latitude: | 40.9211344 |
| Longitude: | -73.8959703 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'DEE 09/29/2000 1000 GALLON TANK BEING PULLED FROM COMMERCIAL PROPERTY HAD HOLES. TAKE PRIDE AWAITING AUTHORIZATION FROM OWNER TO REMOVE SOIL. 04/13/2001 TAKE PRIDE DISPOSED OF TANK AND 69.84 TONS OF CONTAMINATED SOIL. NO FURTHER ACTION. |
| Remarks: | spill is in soil...clean up in progress at this time. |

All Materials:

| | |
|---|---|
| Site ID: | 230529 |
| Operable Unit ID: | 830215 |
| Operable Unit: | 01 |
| Material ID: | 545184 |

**SPILL NUMBER 0007654 (Continued)** **S104782399**

| | |
|---|---|
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**262**
**SW**
**1/4-1/2**
**0.275 mi.**
**1452 ft.**

**MCGLYNN RESIDENCE**
**106 VALENTINE LN**
**YONKERS, NY**

**NY LTANKS** **S105997676**
**N/A**

**Relative:**
**Higher**

**Actual:**
**86 ft.**

LTANKS:

| | |
|---|---|
| Name: | MCGLYNN RESIDENCE |
| Address: | 106 VALENTINE LN |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0209618 / 2003-08-22 |
| Facility ID: | 0209618 |
| Site ID: | 242390 |
| Spill Date: | 2002-12-18 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | WCHD |
| Referred To: | Westchester Cnty Health Dept |
| Reported to Dept: | 2002-12-19 |
| CID: | 211 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2002-12-19 |
| Spill Record Last Update: | 2003-12-09 |
| Spiller Name: | RICHARD MCGLYNN |
| Spiller Company: | Not reported |
| Spiller Address: | 106 VALENTINE LN |
| Spiller County: | 001 |
| Spiller Contact: | RICHARD MCGLYNN |
| Spiller Phone: | (914) 376-4902 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 199187 |
| Latitude: | 40.9166254 |
| Longitude: | -73.9048923 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was WCHD-JACKSON 9/09/03: Letter to Richard M. McGlynn 104 Valentine Lane Corp. from Karen Magnuson, WCDOH dated 8/22/2003. WCDOH recommends NFA at this time. |
| Remarks: | BELOW LIQUID FAILURE |

**MCGLYNN RESIDENCE (Continued)** **S105997676**

All TTF:

| | |
|---|---|
| Facility ID: | 0209618 |
| Spill Number: | 0209618 |
| Spill Tank Test: | 1527853 |
| Site ID: | 242390 |
| Tank Number: | 1 |
| Tank Size: | 1500 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 242390 |
| Operable Unit ID: | 860866 |
| Operable Unit: | 01 |
| Material ID: | 513047 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**AK263** **APT BUILDING** **NY LTANKS** **S112231261**
**SE** **490 SOUTH BROADWAY** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.282 mi.**
**1488 ft.** **Site 3 of 3 in cluster AK**

**Relative:** **Higher**

**Actual:** **94 ft.**

LTANKS:

| | |
|---|---|
| Name: | APT BUILDING |
| Address: | 490 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1206639 / 2013-12-11 |
| Facility ID: | 1206639 |
| Site ID: | 469645 |
| Spill Date: | 2012-10-03 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | ELMOORE |
| Referred To: | Not reported |
| Reported to Dept: | 2012-10-04 |
| CID: | Not reported |

**APT BUILDING (Continued)** **S112231261**

| | |
|---|---|
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2012-10-04 |
| Spill Record Last Update: | 2013-12-11 |
| Spiller Name: | Not reported |
| Spiller Company: | APT BUILDING |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | LIZ ESTEVEZ |
| Spiller Phone: | (212) 373-6174 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 423953 |
| Latitude: | 40.9170463 |
| Longitude: | -73.8966622 |
| DEC Memo: | 10/4*/12 Tank test failure on a WCDOH regulated tank...mm 12/11/2013 -- Have until Feb to remove the tank. AST with no observable spill. nfa ELM |
| Remarks: | 3000 gal ust |

All Materials:

| | |
|---|---|
| Site ID: | 469645 |
| Operable Unit ID: | 1219540 |
| Operable Unit: | 01 |
| Material ID: | 2218047 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**AO264** **COMMERCIAL PROPERTY** **NY LTANKS** **S100153574**
**North** **117 LUDLOW STREET** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.286 mi.**
**1510 ft.** **Site 2 of 3 in cluster AO**

**Relative:** **Lower**
**Actual:** **39 ft.**

LTANKS:

| | |
|---|---|
| Name: | AOT. BLDG. |
| Address: | 117 LUDLOW STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9107610 / 1991-11-19 |
| Facility ID: | 9107610 |
| Site ID: | 293237 |
| Spill Date: | 1991-10-16 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | Not reported |
| Cleanup Ceased: | 1953-06-18 |

**COMMERCIAL PROPERTY (Continued)** **S100153574**

| | |
|---|---|
| SWIS: | 6018 |
| Investigator: | wxwadswo |
| Referred To: | Not reported |
| Reported to Dept: | 1991-10-16 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1991-10-24 |
| Spill Record Last Update: | 1992-01-08 |
| Spiller Name: | Not reported |
| Spiller Company: | ANTHONY SPASATO |
| Spiller Address: | P.O.BOX 230 |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 237349 |
| Latitude: | 40.9240379 |
| Longitude: | -73.9019315 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was W. WADSWORTH 09/27/95: This is additional information about material spilled from the translation of the old spill file: TANK TEST. |
| Remarks: | SUSPECT PLUMBING LEAK OWNER WILL REPAIR CALLER WILL RETEST ASAP VMC CALLED MR.SPARATO WCHD NOTIFIED |

All TTF:

| | |
|---|---|
| Facility ID: | 9107610 |
| Spill Number: | 9107610 |
| Spill Tank Test: | 1539173 |
| Site ID: | 293237 |
| Tank Number: | Not reported |
| Tank Size: | 0 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 293237 |
| Operable Unit ID: | 958059 |
| Operable Unit: | 01 |
| Material ID: | 419806 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |

**COMMERCIAL PROPERTY (Continued)** **S100153574**

Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: Not reported
Recovered: .00
Oxygenate: Not reported

Name: COMMERCIAL PROPERTY
Address: 117 LUDLOW STREET
City,State,Zip: YONKERS, NY
Spill Number/Closed Date: 0904290 / 2009-09-10
Facility ID: 0904290
Site ID: 416441
Spill Date: 2009-07-13
Spill Cause: Tank Test Failure
Spill Source: Commercial/Industrial
Spill Class: C3
Cleanup Ceased: Not reported
SWIS: 6018
Investigator: jbodee
Referred To: WCDOH
Reported to Dept: 2009-07-13
CID: Not reported
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: Not reported
Recommended Penalty: False
Meets Standard: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 2009-07-13
Spill Record Last Update: 2009-09-10
Spiller Name: COLLEEN
Spiller Company: UNKNOWN
Spiller Address: 117 LUDLOW ST
Spiller County: 999
Spiller Contact: JACKIE MALHEIRO
Spiller Phone: (845) 225-5924
Spiller Extention: Not reported
DEC Region: 3
DER Facility ID: 237349
Latitude: 40.9241517
Longitude: -73.9013686
DEC Memo: 7-13-09 Repair and retest. jc 9/10/09: Tank passed a retest after piping was repaired. NFA jod
Remarks: TANK TEST FAILURE ON A 2000 GALLON UST UNK IF ANY PRODUCT WAS SPILLED. Not reported

All Materials:
Site ID: 416441
Operable Unit ID: 1172747
Operable Unit: 01
Material ID: 2164623
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum

**COMMERCIAL PROPERTY (Continued)** **S100153574**

| | |
|---|---|
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**AO265** **APARTMENT BUILDING** **NY LTANKS** **S106971760**
**North** **117- 119 LUDLOW ST** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.286 mi.**
**1510 ft.** **Site 3 of 3 in cluster AO**

**Relative:** **Lower**

**Actual:** **39 ft.**

LTANKS:

| | |
|---|---|
| Name: | APARTMENT BUILDING |
| Address: | 117- 119 LUDLOW ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0501524 / 2009-09-10 |
| Facility ID: | 0501524 |
| Site ID: | 345694 |
| Spill Date: | 2005-05-05 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | WCHD |
| Reported to Dept: | 2005-05-06 |
| CID: | 408 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-05-06 |
| Spill Record Last Update: | 2009-09-10 |
| Spiller Name: | MIKE SCHECK |
| Spiller Company: | APARTMENT BUILDING |
| Spiller Address: | 117- 119 LUDLOW ST. |
| Spiller County: | 001 |
| Spiller Contact: | MIKE SCHECK |
| Spiller Phone: | (800) 440-8265 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 291930 |
| Latitude: | 40.9240340 |
| Longitude: | -73.9019240 |
| DEC Memo: | 9/10/09: This is a PBS facility under WCDOH regs. Failed second test was reported as spill 0904290. Tank was subsequently repiped and passed a retest. NFA jod |
| Remarks: | Also an ulidge leak. Repairs in proggress. |

All TTF:

| | |
|---|---|
| Facility ID: | 0501524 |
| Spill Number: | 0501524 |
| Spill Tank Test: | 1548882 |

**APARTMENT BUILDING (Continued)** **S106971760**

| | |
|---|---|
| Site ID: | 345694 |
| Tank Number: | 25051479 |
| Tank Size: | 2000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 345694 |
| Operable Unit ID: | 1103410 |
| Operable Unit: | 01 |
| Material ID: | 583621 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**AQ266** **RESIDENTIAL - TTF** **NY LTANKS** **S110611344**
**ESE** **33 RANDOLPH STREET** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.287 mi.**
**1518 ft.** **Site 1 of 4 in cluster AQ**

**Relative:**
**Higher**

**Actual:**
**78 ft.**

LTANKS:

| | |
|---|---|
| Name: | RESIDENTIAL - TTF |
| Address: | 33 RANDOLPH STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1008078 / 2014-11-05 |
| Facility ID: | 1008078 |
| Site ID: | 441547 |
| Spill Date: | 2010-11-01 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2010-11-01 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |

**RESIDENTIAL - TTF (Continued)** **S110611344**

| | |
|---|---|
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2010-11-01 |
| Spill Record Last Update: | 2020-05-06 |
| Spiller Name: | WILLIAM |
| Spiller Company: | William |
| Spiller Address: | 33 RANDOLPH STREET |
| Spiller County: | 999 |
| Spiller Contact: | WILLIAM |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 396577 |
| Latitude: | 40.9179776 |
| Longitude: | -73.8950348 |
| DEC Memo: | 11/01/10 Tank is a 550 ust. House is in foreclosure, test done for real estate agency, the listing agent is Kevin Chin at 914-837-6172. They are getting proposals to have the tank removed...mm 11/05/2014 Homeowner Tank Test Failure at least two years old with no known impact, as per Albany, will be closed. NFA JO M |
| Remarks: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 441547 |
| Operable Unit ID: | 1192098 |
| Operable Unit: | 01 |
| Material ID: | 2187322 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Site ID: | 441547 |
| Operable Unit ID: | 1192098 |
| Operable Unit: | 01 |
| Material ID: | 2187323 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

**267**
**WNW**
**1/4-1/2**
**0.288 mi.**
**1519 ft.**

**SOTO HOME**
**69 SUNNYSIDE DRIVE**
**YONKERS, NY**

**NY LTANKS** **S108298779**
**N/A**

**Relative:**
**Lower**

**Actual:**
**43 ft.**

LTANKS:

| | |
|---|---|
| Name: | SOTO HOME |
| Address: | 69 SUNNYSIDE DRIVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0608986 / 2006-11-07 |
| Facility ID: | 0608986 |
| Site ID: | 373079 |
| Spill Date: | 2006-11-06 |
| Spill Cause: | Tank Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODee |
| Referred To: | Not reported |
| Reported to Dept: | 2006-11-06 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2006-11-06 |
| Spill Record Last Update: | 2006-12-08 |
| Spiller Name: | SOTO HOME |
| Spiller Company: | SOTO HOME |
| Spiller Address: | 69 SUNNYSIDE DRIVE |
| Spiller County: | 001 |
| Spiller Contact: | SOTO HOME |
| Spiller Phone: | (917) 662-8159 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 322812 |
| Latitude: | 40.9211817 |
| Longitude: | -73.9065086 |
| DEC Memo: | Not reported |
| Remarks: | while removing tank a water line was hit and oil and water are mixing, they are removing soil at this time but wanted dec to be notified |

All Materials:

| | |
|---|---|
| Site ID: | 373079 |
| Operable Unit ID: | 1130804 |
| Operable Unit: | 01 |
| Material ID: | 2120476 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |

**SOTO HOME (Continued)** **S108298779**

Oxygenate: Not reported

---

**AR268** **RESI: GARCIA** **NY LTANKS** **S104620393**
**SE** **9 LAWRENCE ST** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.304 mi.**
**1604 ft.** **Site 1 of 2 in cluster AR**

**Relative:**
**Higher**

**Actual:**
**92 ft.**

LTANKS:

| | |
|---|---|
| Name: | SPILL NUMBER 9906120 |
| Address: | 9 LAWRENCE ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9906120 / 1999-11-29 |
| Facility ID: | 9906120 |
| Site ID: | 140202 |
| Spill Date: | 1999-08-23 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | B3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 1999-08-23 |
| CID: | 382 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1999-08-23 |
| Spill Record Last Update: | 1999-12-30 |
| Spiller Name: | THILMA GARCIA |
| Spiller Company: | Not reported |
| Spiller Address: | 9 LAWRENCE ST |
| Spiller County: | 001 |
| Spiller Contact: | THILMA GARCIA |
| Spiller Phone: | (914) 776-2487 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 119731 |
| Latitude: | 40.9160648 |
| Longitude: | -73.8961734 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'DEE 11/29/99 NFA. SEE SPILL NUMBER 99-07016. TANK PULLED BY TAKE PRIDE. CONTAMINATION IS EVIDENT. CLOSURE REPORT FOR SPILL 99-07016 REJECTED BY WCHD. SEE THAT SPILL NUMBER FOR ALL FUTURE CLOSURE REPORTS. |
| Remarks: | GROSS FAILURE. HOMEOWNER ADVISED AND RETEST WILL BE SCHEDULED |

All TTF:

| | |
|---|---|
| Facility ID: | 9906120 |
| Spill Number: | 9906120 |
| Spill Tank Test: | 1547520 |
| Site ID: | 140202 |

**RESI: GARCIA (Continued)** **S104620393**

| | |
|---|---|
| Tank Number: | 1 |
| Tank Size: | 2000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 140202 |
| Operable Unit ID: | 1084553 |
| Operable Unit: | 01 |
| Material ID: | 302391 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | RESI: GARCIA |
| Address: | 9 LAWRENCE ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9907016 / 1999-12-09 |
| Facility ID: | 9907016 |
| Site ID: | 140203 |
| Spill Date: | 1999-09-13 |
| Spill Cause: | Tank Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | WCHD |
| Referred To: | Westchester Cnty Health Dept |
| Reported to Dept: | 1999-09-13 |
| CID: | 323 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1999-09-13 |
| Spill Record Last Update: | 2000-02-04 |
| Spiller Name: | DILMA GARCIA |
| Spiller Company: | RESI: GARCIA |
| Spiller Address: | 9 LAWRENCE ST |

**RESI: GARCIA (Continued)** **S104620393**

| | |
|---|---|
| Spiller County: | 001 |
| Spiller Contact: | DILMA GARCIA |
| Spiller Phone: | (914) 776-2487 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 119731 |
| Latitude: | 40.9160648 |
| Longitude: | -73.8961734 |
| DEC Memo: | Not reported |
| Remarks: | TANK WILL BE PULLED AND REMEDIATION WILL BE STARTED |

All Materials:

| | |
|---|---|
| Site ID: | 140203 |
| Operable Unit ID: | 1081302 |
| Operable Unit: | 01 |
| Material ID: | 299725 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**AP269** **COLER HOLDING** **NY LTANKS** **S105135496**
**NNW** **166 LUDLOW STREET** **NY AST** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.309 mi.**
**1634 ft.** **Site 2 of 2 in cluster AP**

**Relative:** **Lower**

**Actual:** **21 ft.**

LTANKS:

| | |
|---|---|
| Name: | BENFIELD ELECTRIC SUPPLY |
| Address: | 166 LUDLOW STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0106279 / 2002-01-15 |
| Facility ID: | 0106279 |
| Site ID: | 153548 |
| Spill Date: | 2001-09-14 |
| Spill Cause: | Tank Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | WCHD |
| Referred To: | Westchester Cnty Health Dept |
| Reported to Dept: | 2001-09-14 |
| CID: | 211 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2001-09-14 |
| Spill Record Last Update: | 2002-04-29 |

**COLER HOLDING (Continued)** **S105135496**

| | |
|---|---|
| Spiller Name: | Not reported |
| Spiller Company: | BENFIELD ELECTRIC SUPPLY |
| Spiller Address: | Not reported |
| Spiller County: | 001 |
| Spiller Contact: | ERIC HARVEY |
| Spiller Phone: | (203) 740-8200 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 244659 |
| Latitude: | 40.9241041 |
| Longitude: | -73.9041513 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was WCDOH 01/15/2002 LETTER SENT TO BENFIELD ELECTRIC BY S. GOREUA (WCDOH); BASED ON REIVEW OF SITE CLOSURE REPORT FOR THIS SITE, WCDOH REQUIRES NO FURTHER ACTION. |
| Remarks: | after ust was removed tests analytical test show soil contamination |

All Materials:

| | |
|---|---|
| Site ID: | 153548 |
| Operable Unit ID: | 844620 |
| Operable Unit: | 01 |
| Material ID: | 531142 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | COLER HOLDING |
| Address: | 166 LUDLOW STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9414453 / 1995-02-03 |
| Facility ID: | 9414453 |
| Site ID: | 302819 |
| Spill Date: | 1995-02-01 |
| Spill Cause: | Tank Overfill |
| Spill Source: | Commercial/Industrial |
| Spill Class: | D4 |
| Cleanup Ceased: | 1995-02-03 |
| SWIS: | 6018 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1995-02-01 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Responsible Party |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2003-12-02 |
| Spill Record Last Update: | 2003-12-02 |
| Spiller Name: | Not reported |

**COLER HOLDING (Continued)** **S105135496**

| | |
|---|---|
| Spiller Company: | ROBISON OIL CORP. |
| Spiller Address: | Not reported |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 244659 |
| Latitude: | 40.9241041 |
| Longitude: | -73.9041513 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | MAINLY IN THE BASEMENT OF BUILDING |

All Materials:

| | |
|---|---|
| Site ID: | 302819 |
| Operable Unit ID: | 1011872 |
| Operable Unit: | 01 |
| Material ID: | 561454 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 15.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | SOUTHWAY INVESTCO LLC |
| Address: | 166 LUDLOW STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| PBS Number: | 3-600880 |
| Site Status: | Unregulated: <1101 gal. PBS |
| GDS Number: | Not reported |
| Operator Name: | Benfield Electrical Supply |
| Owner Name: | Southway Investco LLC |
| Owner Street: | 166 Ludlow Street |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10705 |
| | |
| Tank Number: | 1 |
| Status: | 0. Administratively closed |
| Date Installation: | 01/01/1900 |
| Capacity: | 1000 |
| Product Stored: | Not reported |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 2. Underground/on ground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |

**COLER HOLDING (Continued)** **S105135496**

| | |
|---|---|
| Piping External Protection: | 1. Painted/Asphalt Coating |
| Piping Leak Detection: | Not reported |
| Piping Secondary Containment: | Not reported |
| Overfill Prevention: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 2. Suction |

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**AQ270** **GILROY RESIDENCE** **NY LTANKS** **S110540968**
**ESE** **45 RADFORD STREET** **NY Spills** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.310 mi.**
**1635 ft.** **Site 2 of 4 in cluster AQ**

**Relative:**
**Higher**

**Actual:**
**79 ft.**

LTANKS:

| | |
|---|---|
| Name: | GILROY RESIDENCE |
| Address: | 45 RADFORD STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1006861 / 2011-07-25 |
| Facility ID: | 1006861 |
| Site ID: | 440240 |
| Spill Date: | 2010-09-25 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2010-09-25 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2010-09-25 |
| Spill Record Last Update: | 2011-07-25 |
| Spiller Name: | Not reported |
| Spiller Company: | ADVANCED TANK SERVICE |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | SEAN GILROY |
| Spiller Phone: | (914) 261-9826 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 405384 |
| Latitude: | 40.9173917 |
| Longitude: | -73.8947985 |
| DEC Memo: | 6/23/11: No call backs were made when initial spill was reported. Castlton removed the UST yesterday and reported Spill 1103229. jod 07/25/11 See Castlton Environmental Contractors spill closure report under spill 1103229. NFA TG |
| Remarks: | tank test failure |

All Materials:

| | |
|---|---|
| Site ID: | 440240 |

**GILROY RESIDENCE (Continued)** **S110540968**

| | |
|---|---|
| Operable Unit ID: | 1190856 |
| Operable Unit: | 01 |
| Material ID: | 2185941 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | OM RESIDENCE |
| Address: | 45 RADFORD STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1103229 / 2011-07-22 |
| Facility ID: | 1103229 |
| Facility Type: | ER |
| DER Facility ID: | 405384 |
| Site ID: | 450787 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B4 |
| SWIS: | 6018 |
| Spill Date: | 2011-06-22 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2011-06-22 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Private Dwelling |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2011-06-22 |
| Spill Record Last Update: | 2019-04-18 |
| Spiller Name: | Not reported |
| Spiller Company: | OM |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | OM |
| Latitude: | 40.9173917 |
| Longitude: | -73.8947985 |
| DEC Memo: | 6/22/11 left message with both Castlton and the owner Mr Om. dw<br>6/23/11: Previous TTF Spill is<br>1006861. Message sent to Castlton requesting additional information.<br>jod 6/23/2011 11:15 AM:: Jesse<br>DeGironimo : Om is the new owner. He bought the property on March 7,<br>2011. He bought the property<br>from a law firm, Kilmartin and Kilmartin. Om had NOT indicated to us<br>that he knew of a prior spill |

**GILROY RESIDENCE (Continued)** **S110540968**

number open on the property. We have no records of who Mr. Gilroy is. I will let you know if I find
more information on this. We are assisting Om in filing a claim with Harleysville insurance. jod
07/22/11 Castlton reported that they removed that tank and sampled the soil. Post excavation soil
sample results were below DEC guidance values. (Report in edocs) NFA. TG

Remarks: 1000gal ust/tank removed, loss of product to soil

All Materials:

| | |
|---|---|
| Site ID: | 450787 |
| Operable Unit ID: | 1200988 |
| Operable Unit: | 01 |
| Material ID: | 2197463 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**AS271** **SADIN HOME** **NY LTANKS S108297578**
**WSW** **112 BELVEDERE DRIVE** **NY Spills N/A**
**1/4-1/2** **YONKERS, NY**
**0.311 mi.**
**1644 ft.** **Site 1 of 3 in cluster AS**

**Relative:** **Lower**
**Actual:** **51 ft.**

LTANKS:

| | |
|---|---|
| Name: | SADIN HOME |
| Address: | 112 BELVEDERE DRIVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0501178 / 2012-08-14 |
| Facility ID: | 0501178 |
| Site ID: | 344343 |
| Spill Date: | 2005-04-28 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | UNASSIGNED |
| Referred To: | Not reported |
| Reported to Dept: | 2005-04-28 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-04-28 |
| Spill Record Last Update: | 2012-08-14 |
| Spiller Name: | MR. SADIN |

**SADIN HOME (Continued)** **S108297578**

| | |
|---|---|
| Spiller Company: | SADIN HOME |
| Spiller Address: | 112 BELVADERE DRIVE |
| Spiller County: | 001 |
| Spiller Contact: | MR. SADIN |
| Spiller Phone: | (914) 968-9100 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 291026 |
| Latitude: | 40.9188070 |
| Longitude: | -73.9070180 |
| DEC Memo: | 7/30/10 Homeowner TTF JO'M 7/14/12 HO TTF greater then 5 years old with no apperent impact will be closed agreed by both Albany and Region 3. NFA JO'M |
| Remarks: | UNCOVER REPAIR OR REMOVE |

All TTF:

| | |
|---|---|
| Facility ID: | 0501178 |
| Spill Number: | 0501178 |
| Spill Tank Test: | 1548856 |
| Site ID: | 344343 |
| Tank Number: | 1 |
| Tank Size: | 1000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 344343 |
| Operable Unit ID: | 1102985 |
| Operable Unit: | 01 |
| Material ID: | 583197 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | PARSONAGE |
| Address: | 112 BELVEDERE DRIVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0611541 / 2007-03-01 |
| Facility ID: | 0611541 |
| Facility Type: | ER |
| DER Facility ID: | 291026 |

**SADIN HOME (Continued)** **S108297578**

| | |
|---|---|
| Site ID: | 376191 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 2007-01-17 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2007-01-17 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Private Dwelling |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2007-01-17 |
| Spill Record Last Update: | 2007-03-01 |
| Spiller Name: | ED ALLEN |
| Spiller Company: | PARSONAGE |
| Spiller Address: | 112 BELVADERE DRIVE |
| Spiller Company: | 001 |
| Contact Name: | ED ALLEN |
| Latitude: | 40.9186117 |
| Longitude: | -73.9070886 |
| DEC Memo: | Not reported |
| Remarks: | CUSTOMER ORDERED 300 GALLONS AND IT SHOT OUT AT 80 GALLONS AND IS CLEANING UP |

All Materials:

| | |
|---|---|
| Site ID: | 376191 |
| Operable Unit ID: | 1133793 |
| Operable Unit: | 01 |
| Material ID: | 2123615 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 3.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**AQ272** **RESIDENCE** **NY LTANKS** **S104621736**
**ESE** **42 RANDOLPH STREET** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.313 mi.**
**1652 ft.** **Site 3 of 4 in cluster AQ**

**Relative:**
**Higher**

**Actual:**
**78 ft.**

LTANKS:

| | |
|---|---|
| Name: | RESIDENCE |
| Address: | 42 RANDOLPH STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0002770 / 2000-11-20 |

**RESIDENCE (Continued)** **S104621736**

| | |
|---|---|
| Facility ID: | 0002770 |
| Site ID: | 331160 |
| Spill Date: | 2000-06-05 |
| Spill Cause: | Tank Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2000-06-05 |
| CID: | 389 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2000-06-05 |
| Spill Record Last Update: | 2000-11-21 |
| Spiller Name: | Not reported |
| Spiller Company: | KURTISH RESIDENCE |
| Spiller Address: | 42 RANDOLPH ST |
| Spiller County: | 001 |
| Spiller Contact: | CALLER |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 266333 |
| Latitude: | 40.9178533 |
| Longitude: | -73.8948017 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'DEE 6/06/2000 TAKE PRIDE PULLED AND DISPOSED OF TANK, LINED HOLE WITH PLASTIC, AND BACKFILLED WITH GRAVEL. REPORT THAT CONTAMINATION IS STILL PRESENT IN EXCAVATION. TAKE PRIDE AWAITING HOMEOWNER'S APPROVAL TO REOPEN EXCAVATION AND COMPLETE CLEANUP. 6/28/2000 HOMEOWNER REPORTS TAKE PRIDE REMOVED TANK BEFORE SHE, HER LAWYER, OR THE YONKERS FIRE INSPECTOR COULD INSPECT IT. SHE REPORTS THAT THE TANK WAS NOT LEAKING AND NO SOIL CONTAMINATION WAS PRESENT. SHE STATES THAT TAKE PRIDE REMOVED APPROXIMATELY 25 TONS OF SOIL BEFORE BACKFILLING. 7/06/2000 INSPECTOR LONGO OF YONKERS FIRE DEPARTMENT CONTACTED. REPORTS HIS OFFICE SHOWS NO RECORD OF INSPECTION OF SITE. 7/10/2000 DUTCHESS ENVIRONMENTAL TO RE-EXCAVATE AND INSPECT SITE 8/22/2000 JACK TROCCOLI OF DUTCHESS ENVIRONMENTAL REPORTS THAT HE EXCAVATED BACKFILL AND POLY. HE REPORTS THERE IS NO EVIDENCE OF CONTAMINATION AND NO EVIDENCE OF SOIL REMOVAL. SOIL SAMPLES TO BE TAKEN. 11/20/2000 SOIL SAMPLE RESULTS ARE ALL NON-DETECT. NO EVIDENCE OF LEAK OR DISCHARGE FOUND. NO FURTHER ACTION REQUIRED. |
| Remarks: | caller repporting a spill of material from holes in a tank no clean up as of yet and no callback necessary unk amount spilled and not recovered. |

All Materials:

| | |
|---|---|
| Site ID: | 331160 |
| Operable Unit ID: | 824861 |
| Operable Unit: | 01 |
| Material ID: | 551119 |

**RESIDENCE (Continued)** **S104621736**

| | |
|---|---|
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**273**
**NNW**
**1/4-1/2**
**0.313 mi.**
**1654 ft.**

**MZ MOVERS**
**231 HAWTHORNE AVE**
**YONKERS, NY**

**NY LTANKS** **S105054785**
**N/A**

**Relative:**
**Lower**

**Actual:**
**31 ft.**

LTANKS:

| | |
|---|---|
| Name: | MZ MOVERS |
| Address: | 231 HAWTHORNE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0101254 / 2002-02-11 |
| Facility ID: | 0101254 |
| Site ID: | 248459 |
| Spill Date: | 2001-05-02 |
| Spill Cause: | Tank Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | B3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | WCHD |
| Referred To: | Westchester Cnty Health Dept |
| Reported to Dept: | 2001-05-02 |
| CID: | 397 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2001-05-02 |
| Spill Record Last Update: | 2002-06-05 |
| Spiller Name: | CALLER |
| Spiller Company: | MZ MOVERS |
| Spiller Address: | 231 HAWTHORNE AVE |
| Spiller County: | 001 |
| Spiller Contact: | CALLER |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 203877 |
| Latitude: | 40.9248749 |
| Longitude: | -73.9027965 |
| DEC Memo: | Not reported |
| Remarks: | caller co was contractedt o clean tank and discovered that the tank has failed and spilled oil underground. due to be cleaned next week |

All Materials:

**MZ MOVERS (Continued)** **S105054785**

| | |
|---|---|
| Site ID: | 248459 |
| Operable Unit ID: | 838157 |
| Operable Unit: | 01 |
| Material ID: | 536961 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**AT274** **T & G SERVICE STATION** **NY LTANKS** **U003075754**
**NE** **310 SOUTH BROADWAY** **NY Spills** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.316 mi.**
**1666 ft.** **Site 1 of 4 in cluster AT**

**Relative:** **Higher**
**Actual:** **97 ft.**

LTANKS:

| | |
|---|---|
| Name: | T & G SERVICE STATION |
| Address: | 310 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 8806675 / 1995-12-29 |
| Facility ID: | 8806675 |
| Site ID: | 312644 |
| Spill Date: | 1988-11-09 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Class: | D4 |
| Cleanup Ceased: | 1995-12-29 |
| SWIS: | 6018 |
| Investigator: | jkomara |
| Referred To: | Not reported |
| Reported to Dept: | 1988-11-09 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | True |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1988-11-29 |
| Spill Record Last Update: | 1995-12-29 |
| Spiller Name: | Not reported |
| Spiller Company: | T & G SERVICE STATION |
| Spiller Address: | 310 SOUTH BROADWAY |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 252083 |
| Latitude: | 40.9219710 |
| Longitude: | -73.8958495 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was |

**T & G SERVICE STATION (Continued)** **U003075754**

O'MARA 11/10/88: SPILLER EMPTIED TANKS. SPILLER TO INSTALL TWO MW'S.
09/27/95: This is additional information about material spilled from
the translation of the old spill file: UNLEADED.
Remarks: VISUAL LOSS OF PRODUCT IN TANK OVERNIGHT. 2 3K TANKS, BEING PUMPED OUT. TANKS WILL BE OPEN FOR VISUAL INSPECTION AND POSSIBLE RELINING. MONITORING WELLS WILL BE INSTALLED ON SITE.

All TTF:

| | |
|---|---|
| Facility ID: | 8806675 |
| Spill Number: | 8806675 |
| Spill Tank Test: | 1534876 |
| Site ID: | 312644 |
| Tank Number: | Not reported |
| Tank Size: | 0 |
| Material: | 0009 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 312644 |
| Operable Unit ID: | 921848 |
| Operable Unit: | 01 |
| Material ID: | 455013 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | BROADWAY GAS POST |
| Address: | 310 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9012588 / 1991-03-12 |
| Facility ID: | 9012588 |
| Facility Type: | ER |
| DER Facility ID: | 252083 |
| Site ID: | 312645 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | Not reported |
| SWIS: | 6018 |
| Spill Date: | 1991-03-08 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |

**T & G SERVICE STATION (Continued)** **U003075754**

| | |
|---|---|
| Reported to Dept: | 1991-03-08 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 1953-06-18 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | True |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2003-12-02 |
| Spill Record Last Update: | 2003-12-02 |
| Spiller Name: | Not reported |
| Spiller Company: | SAME |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Latitude: | 40.9219710 |
| Longitude: | -73.8958495 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | CAP ON STICK VALVE WAS LOOSE USED 3 M PADS NO CALL BACK NECES. |

All Materials:

| | |
|---|---|
| Site ID: | 312645 |
| Operable Unit ID: | 952340 |
| Operable Unit: | 01 |
| Material ID: | 562036 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 15.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**AT275** **BROADWAY GAS POST** **UST FINDER RELEASE** **1029068875**
**NE** **310 SOUTH BROADWAY** **N/A**
**1/4-1/2** **YONKERS, NY 0**
**0.316 mi.**
**1666 ft.** **Site 2 of 4 in cluster AT**

**Relative:**
**Higher**

**Actual:**
**97 ft.**

UST FINDER RELEASE:

| | |
|---|---|
| Object ID: | 258982 |
| Facility ID: | NY252083 |
| Lust ID: | NY9012588 |
| Name: | BROADWAY GAS POST |
| Address: | 310 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY 0 |
| Address Match Type: | Not reported |
| Reported Date: | 1991/03/08 15:59:59+00 |
| Status: | No Further Action |
| Substance: | Not reported |
| Population within 1500ft: | 7978 |
| Domestic Wells within 1500ft: | 2 |

**BROADWAY GAS POST (Continued)** **1029068875**

| | |
|---|---|
| Land Use: | Developed, High Intensity |
| Within SPA: | No |
| SPA PWS Facility ID: | Not reported |
| SPA Water Type: | Not reported |
| SPA Facility Type: | Not reported |
| SPA HUC12: | Not reported |
| Within WHPA: | No |
| WHPA PWS Facility ID: | Not reported |
| WHPA Water Type: | Not reported |
| WHPA Facility Type: | Not reported |
| WHPA HUC12: | Not reported |
| Within 100yr Floodplain: | No |
| Tribe: | Not reported |
| EPA Region: | 2 |
| NFA Letter 1: | Not reported |
| NFA Letter 2: | Not reported |
| NFA Letter 3: | Not reported |
| NFA Letter 4: | Not reported |
| Closed With Residual Contaminate: | Not reported |
| Coordinate Source: | State |
| X Coord: | -73.8958499999999 |
| Y Coord: | 40.92197 |
| Latitude: | 40.92197 |
| Longitude: | -73.8958499999999 |

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**AT276** **T & G SERVICE STATION** **UST FINDER RELEASE** **1029068876**
**NE** **310 SOUTH BROADWAY** **N/A**
**1/4-1/2** **YONKERS, NY 0**
**0.316 mi.**
**1666 ft.** **Site 3 of 4 in cluster AT**

**Relative:** **Higher**
**Actual:** **97 ft.**

UST FINDER RELEASE:

| | |
|---|---|
| Object ID: | 258981 |
| Facility ID: | NY252083 |
| Lust ID: | NY8806675 |
| Name: | T & G SERVICE STATION |
| Address: | 310 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY 0 |
| Address Match Type: | Not reported |
| Reported Date: | 1988/11/09 16:00:00+00 |
| Status: | No Further Action |
| Substance: | Not reported |
| Population within 1500ft: | 7978 |
| Domestic Wells within 1500ft: | 2 |
| Land Use: | Developed, High Intensity |
| Within SPA: | No |
| SPA PWS Facility ID: | Not reported |
| SPA Water Type: | Not reported |
| SPA Facility Type: | Not reported |
| SPA HUC12: | Not reported |
| Within WHPA: | No |
| WHPA PWS Facility ID: | Not reported |
| WHPA Water Type: | Not reported |
| WHPA Facility Type: | Not reported |
| WHPA HUC12: | Not reported |
| Within 100yr Floodplain: | No |
| Tribe: | Not reported |
| EPA Region: | 2 |

**T & G SERVICE STATION (Continued)** **1029068876**

| | |
|---|---|
| NFA Letter 1: | Not reported |
| NFA Letter 2: | Not reported |
| NFA Letter 3: | Not reported |
| NFA Letter 4: | Not reported |
| Closed With Residual Contaminate: | Not reported |
| Coordinate Source: | State |
| X Coord: | -73.8958499999999 |
| Y Coord: | 40.92197 |
| Latitude: | 40.92197 |
| Longitude: | -73.8958499999999 |

---

**277 South 1/4-1/2 0.318 mi. 1678 ft.** **RESIDENTIAL PBS TTF**
**17 PERSHING AVE**
**YONKERS, NY**

**NY LTANKS** **S127481839**
**N/A**

**Relative: Higher**
**Actual: 152 ft.**

LTANKS:

| | |
|---|---|
| Name: | RESIDENTIAL PBS TTF |
| Address: | 17 PERSHING AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 2100259 / 2021-09-20 |
| Facility ID: | 2100259 |
| Site ID: | 617928 |
| Spill Date: | 2021-04-09 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | BTRANSOM |
| Referred To: | WCDOH |
| Reported to Dept: | 2021-04-09 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2021-04-09 |
| Spill Record Last Update: | 2021-09-20 |
| Spiller Name: | JACK OTARO |
| Spiller Company: | UNKNOWN |
| Spiller Address: | 17 PERSHING AVE |
| Spiller County: | 999 |
| Spiller Contact: | JACK OTARO |
| Spiller Phone: | (914) 262-1530 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 565640 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 4/9/21 tank test failure of a 2k #2 fuel oil UST for a small apartment building. Tank is an older tank and was never tested in the past. Tank was exhibiting a hissing sound and no oil has been identified as leaking from the tank at this time. BW 4/13/21: From |

**RESIDENTIAL PBS TTF (Continued)** **S127481839**

Chris Lalak at WCDOH: 2k #2 Heating oil underground tank from 1960. Spoke to owner today, Jack Otero. Planning on having NEE remove tank installing small tank in the basement. Sent him an email. Within two weeks replace or pump out(set up temp tank) or repair/retest. Update required by 4-26. jod 06-08-21 Tank has been pumped out waiting for permits from Yonkers. Tank is to be removed. BTR 09-17-21 Received TCR from NEE. BTR 09-20-21 Reviewed TCR. On August 11 NEE removed a 2,000 gallon UST registered as 3-802111. No soil contamination was observed in the excavation using a PID meter. Laboratoy results for six endpoint samples were non-detect for VOCs. Some SVOCs had slight exceedances of CP-52 guidelines. No Groundwater was observed in the excavation. NFA. BTR

Remarks: 2000 ust family owned facility tank test failure. pbs 3-802111. no product released.

All Materials:

| | |
|---|---|
| Site ID: | 617928 |
| Operable Unit ID: | 1365096 |
| Operable Unit: | 01 |
| Material ID: | 2377580 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**278**
**East**
**1/4-1/2**
**0.319 mi.**
**1686 ft.**

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE**
**48 MCLEAN AVENUE (F/K/A 46-70 MCLEAN AVENUE)**
**YONKERS, NY 10705**

**NY ENG CONTROLS** **S127478130**
**NY INST CONTROL** **N/A**
**NY BROWNFIELDS**

**Relative:**
**Higher**

**Actual:**
**83 ft.**

ENG CONTROLS:

| | |
|---|---|
| Name: | 46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE |
| Address: | 48 MCLEAN AVENUE (F/K/A 46-70 MCLEAN AVENUE) |
| City,State,Zip: | YONKERS, NY 10705 |
| Site Code: | 615469 |
| HW Code: | C360211 |
| Control Code: | 36 |
| Control Type: | ENG |
| Date Record Added: | 09/26/2024 |
| Date Rec Updated: | 02/10/2025 |
| Updated By: | MSHUBICK |
| Site Description: | Site Location: The site is 0.87-acre corner lot located between two city parks, Leslie Sutherland Park to the North and Pelton Oval Park to the northeast. McLean Avenue runs along the southern border, and Van Cortlandt Park Avenue runs along the eastern border. Site Features: A vacant on-site building covers most of the site. The building interior has been demolished to allow for investigation, remediation as an Interim Remedial Measure (IRM), and stabilizing the exterior walls. The facade of the building and fencing remains around the site. The perimeter of the site is covered by a concrete and asphalt sidewalk and walkway. The building has been vacated since April 2022 by the previous tenants to allow investigation and |

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

demolition to begin. The first-floor slab and vapor barrier have been installed. A portion of the second floor is built into the hillside. The portion of the second floor built into the hillside requires a slab and a vapor barrier. Though not required by the Department, vapor extraction points were pre-emptively installed in the first floor of the partially constructed building and are proposed to be installed in the second floor upon completion of the building. Extraction points were installed instead of laterals due to the presence of shallow bedrock and perched groundwater beneath the building slab. A vapor barrier has also been installed beneath both floors of the building. Current Zoning and Land Use: The site is located in a Commercial District (CM) zoning district, which allows for commercial use. The CM is consistent with the proposed use as the CM permits use as a self-storage warehouse. Past Use of the Site: The site historically operated as an auto repair and service station from 1987 to April 2022 on the first level with various uses since the 1950 s (e.g., printing, metal manufacturing, sports manufacturer, laundry). The lower level of the site was separated into eight units in 1956. The second floor was used for heat sealing to customize jerseys, sweatshirts and performance wear. Previously, the area was predominantly inactive storage space which included collectible dolls and toys, frames, leather goods, office supplies, and antiquated printing machines. There was an inactive 5,000-gallon fuel oil underground storage tank in the southeastern portion of the site beneath a ramp. This tank was removed during the IRM conducted in October 2022 and properly closed out per local and state regulations. Documentation is provided in the IRM completion report. Site Geology and Hydrogeology: According to a 2018 Phase I and an April 2020 Phase II investigation, bedrock outcrops are located to the north of the site. Geotechnical and subsurface investigations have determined the building was constructed into bedrock, which is present 1 to 5 feet (ft.) below surface grade. Surface grade is 80 to 90 ft. above mean sea level. Groundwater depth varied across the site from approximately 1 ft. below ground surface (bgs.) at the northern/central portion to approximately 16 ft. bgs in the southeast corner of the site. Groundwater generally flows towards the southwest, to the Hudson River approximately one mile away west of the site.

Env Problem: Soil and groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides, metals, cyanide, and per-and poly fluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. The primary contaminants of concern at the site are petroleum-related VOCs and SVOCs in groundwater and VOCs in soil vapor. Metals, pesticides, and polychlorinated biphenyls (PCBs) are present in site-wide soils but not in groundwater. Soil - Following the completion of the on-site IRM several constituents in soil were identified at concentrations in the top 15 feet or just above bedrock but were below the intended Restricted Residential Use SCOs except for one exceedance of lead at 572 ppm. Excavation continued until it was determined unsafe, and this area could not beremoved due to the presence of the northern first floor retaining wall and abundance of bedrock. No VOCs were detected during the RI in soil investigation. The following is a list of those compounds and the maximum exceedances remaining following the excavation IRM: Trivalent chromium detected at 94 ppm versus UUSCO of 30 ppm and below the RRSCO of 180 ppm; nickel was detected at 59.8 ppm versus RRSCO of 310 ppm; lead was detected at 572 ppm versus UUSCO of 63 ppm and the

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

RRSCO of 400 ppm; mercury was detected at 0.75 ppm versus UUSCO 0.18 ppm and below the RRSCO of 0.81 ppm. VOCs, SVOCs, pesticides and PCBs were not detected above the UUSCOs following the IRM activities. Data does not indicate any off-site impacts in soil related to this site. Groundwater Two rounds of groundwater were taken Pre-IRM and Post-IRM. No metals, PCBs or pesticides were detected in filtered or unfiltered groundwater samples in exceedance of groundwater standards except for iron, manganese, and sodium. Iron, manganese, and sodium appear to be background levels with no distinction between upgradient and downgradient monitoring wells. These are naturally occurring or attributable to road salt. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. VOCs and SVOCs were detected above the groundwater standards as noted: benzene was detected at 7.4 ppb and 4.6 ppb exceeding the standard of 1 ppb; toluene was detected at 48 ppb and 17 ppb exceeding the standard of 5 ppb; and ethylbenzene was detected at 300 ppb exceeding the standard of 5 ppb. Total xylenes were detected at 1400 ppb exceeding the standard of 5 ppb. 1,2,4-trimethlybenezene was detected up to 270 ppb and 1,3,5-trimethlybenezene was detected up to 110 ppb exceeding standards of 5 ppb for both. For SVOCs, naphthalene was detected at 83 ppb exceeding the standard of 10 ppb. These concentrations were detected post-IRM near the tank removal. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 78.8 and 8.26 parts per trillion (ppt), respectively, exceeding the 6.7 ppt and 2.7 ppt groundwater quality guidance values. 1,4-dioxane was not detected. It is unlikely off-site migration of the groundwater contamination is affecting the surrounding area. There are several closed spills across McLean Ave. Groundwater wells installed in sidewalk off-site and downgradient of the IRM tank removal did not show any exceedances for VOCs or SVOCs, or any petroleum contamination. Sub-Slab Soil Vapor and Indoor Air - Prior to the IRM, a total of nine sub-slab vapor, four indoor air, and two ambient air samples were collected on-site from within the building and outside and analyzed for VOCs and SVOCs. Primarily petroleum related contaminants were detected in the sub-slab vapor samples. PCE was detected in all nine sub-slab vapor samples collected with a maximum detection of 368 micrograms per cubic meter (ug/m3). PCE was detected in all four indoor air samples collected with a maximum detection of 1.28 ug/m3. Other VOCs detected in sub-slab vapor samples collected included carbon tetrachloride at 10 ug/m3, cyclohexane at 190,000 ug/m3, ethylbenzene at 13,000 ug/m3, n-heptane at 300,000 ug/m3, n-hexane at 280,000 ug/m3, o-xylene at 4,300 ug/m3, m & p xylene at 22,000 ug/m3, and toluene at 4,500 ug/m3. Heptane was detected in the indoor air sample collected near the petroleum tank ramp at 1,320 ug/m3. Toluene was detected at 35.4 ug/m3 in indoor air Based on the concentrations in the soil vapor intrusion samples, a post remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected. As detailed in section 6.2, based on the concentrations in the soil vapor intrusion samples, a post-remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected.

Health Problem: Since the site is fenced and covered by asphalt or concrete, people

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater and/or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion sampling identified impacts in indoor air quality in the on-site building. In addition, sampling indicates soil vapor intrusion is not a concern for off-site buildings.

| | |
|---|---|
| Dump: | False |
| Structure: | False |
| Lagoon: | False |
| Landfill: | False |
| Pond: | False |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | Not reported |
| Dell: | Not reported |
| Record Add: | 2021-04-15 13:37:00 |
| Record Upd: | 2024-09-19 11:24:00 |
| Updated By: | MSHUBICK |
| Own Op: | Document Repository |
| Sub Type: | NNN |
| Owner Name: | Anne Campbell |
| Owner Company: | Yonkers Public Library-Riverfront Library |
| Owner Address: | 1 Larkin Center |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | P03 |
| Owner Name: | Kurt Spring |
| Owner Company: | SnL Yonkers, LLC |
| Owner Address: | C/O Equity Resource Investments, LLC |
| Owner Addr2: | 1280 Massachusetts Ave, Suite 400 |
| Owner City,St,Zip: | Cambridge, MA 02138 |
| Owner Country: | United States of America |
| Own Op: | 6 |
| Sub Type: | P03 |
| Owner Name: | Kurt Spring |
| Owner Company: | SNL Yonkers, LLC |
| Owner Address: | Equity Resource Investments, LLC |
| Owner Addr2: | 1280 Massachusetts Avenue, 4th Floor, Suite 400 |
| Owner City,St,Zip: | Cambridge, MA 02138 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | P03 |
| Owner Name: | Michael Colvin |
| Owner Company: | Hampshire Co |
| Owner Address: | 21 South Street |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Morristown, NJ 07960 |
| Owner Country: | United States of America |

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Own Op: Document Repository
Sub Type: NNN

Owner Name:
Owner Company: DECInfo Locator
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: NY
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Scott Dumont
Owner Company: Realty Genesis Co LLC
Owner Address: 1280 Massachusetts Avenue
Owner Addr2: Suite 400
Owner City,St,Zip: Manchester, MA 02138
Owner Country: United States of America
HW Code: C360211
Waste Type: lead
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: benzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1254
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: heptane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: mercury
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: naphthalene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDT
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1260
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,3,5-trimethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,2,4-TMB
Waste Quantity: UNKNOWN
Waste Code: Not reported

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

| | |
|---|---|
| HW Code: | C360211 |
| Waste Type: | zinc |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | DDE |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | chromium |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | tetrachloroethene (PCE) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | hexane |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | nickel |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | ethylbenzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | xylene (mixed) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | toluene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | carbon tetrachloride |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| Crossref ID: | 9310281 |
| Cross Ref Type Code: | 01 |
| Cross Ref Type: | Spill No. |
| Record Added Date: | 2024-09-26 13:14:00 |
| Record Updated: | 2024-09-26 13:14:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | C360211-05-21 |
| Cross Ref Type Code: | 23 |
| Cross Ref Type: | Agreement/Consent Order Number |
| Record Added Date: | 2023-09-14 16:46:00 |
| Record Updated: | 2023-09-14 16:46:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | 631933465 |
| Cross Ref Type Code: | 25 |
| Cross Ref Type: | County Recording Identifier |
| Record Added Date: | 2024-05-21 15:34:00 |
| Record Updated: | 2024-05-21 15:34:00 |

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

| | |
|---|---|
| Updated By: | MSHUBICK |
| Crossref ID: | 05/12/2021 |
| Cross Ref Type Code: | 26 |
| Cross Ref Type: | Agreement/Consent Order Date |
| Record Added Date: | 2023-09-14 16:45:00 |
| Record Updated: | 2023-09-14 16:45:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | 2000623 |
| Cross Ref Type Code: | 01 |
| Cross Ref Type: | Spill No. |
| Record Added Date: | 2021-01-07 13:25:00 |
| Record Updated: | 2021-01-07 13:25:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | 9310281 |
| Cross Ref Type Code: | 30 |
| Cross Ref Type: | SP Site ID |
| Record Added Date: | 2021-01-07 11:07:00 |
| Record Updated: | 2021-01-07 11:07:00 |
| Updated By: | MSHUBICK |

| | |
|---|---|
| Name: | 46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE |
| Address: | 48 MCLEAN AVENUE (F/K/A 46-70 MCLEAN AVENUE) |
| City,State,Zip: | YONKERS, NY 10705 |
| Site Code: | 615469 |
| HW Code: | C360211 |
| Control Code: | 13 |
| Control Type: | ENG |
| Date Record Added: | 09/26/2024 |
| Date Rec Updated: | 02/10/2025 |
| Updated By: | MSHUBICK |
| Site Description: | Site Location: The site is 0.87-acre corner lot located between two city parks, Leslie Sutherland Park to the North and Pelton Oval Park to the northeast. McLean Avenue runs along the southern border, and Van Cortlandt Park Avenue runs along the eastern border. Site Features: A vacant on-site building covers most of the site. The building interior has been demolished to allow for investigation, remediation as an Interim Remedial Measure (IRM), and stabilizing the exterior walls. The facade of the building and fencing remains around the site. The perimeter of the site is covered by a concrete and asphalt sidewalk and walkway. The building has been vacated since April 2022 by the previous tenants to allow investigation and demolition to begin. The first-floor slab and vapor barrier have been installed. A portion of the second floor is built into the hillside. The portion of the second floor built into the hillside requires a slab and a vapor barrier. Though not required by the Department, vapor extraction points were pre-emptively installed in the first floor of the partially constructed building and are proposed to be installed in the second floor upon completion of the building. Extraction points were installed instead of laterals due to the presence of shallow bedrock and perched groundwater beneath the building slab. A vapor barrier has also been installed beneath both floors of the building. Current Zoning and Land Use: The site is located in a Commercial District (CM) zoning district, which allows for commercial use. The CM is consistent with the proposed use as the CM permits use as a self-storage warehouse. Past Use of the Site: The site historically operated as an auto repair and service station from 1987 to April 2022 on the first level with various uses since the |

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

1950 s (e.g., printing, metal manufacturing, sports manufacturer, laundry). The lower level of the site was separated into eight units in 1956. The second floor was used for heat sealing to customize jerseys, sweatshirts and performance wear. Previously, the area was predominantly inactive storage space which included collectible dolls and toys, frames, leather goods, office supplies, and antiquated printing machines. There was an inactive 5,000-gallon fuel oil underground storage tank in the southeastern portion of the site beneath a ramp. This tank was removed during the IRM conducted in October 2022 and properly closed out per local and state regulations. Documentation is provided in the IRM completion report. Site Geology and Hydrogeology: According to a 2018 Phase I and an April 2020 Phase II investigation, bedrock outcrops are located to the north of the site. Geotechnical and subsurface investigations have determined the building was constructed into bedrock, which is present 1 to 5 feet (ft.) below surface grade. Surface grade is 80 to 90 ft. above mean sea level. Groundwater depth varied across the site from approximately 1 ft. below ground surface (bgs.) at the northern/central portion to approximately 16 ft. bgs in the southeast corner of the site. Groundwater generally flows towards the southwest, to the Hudson River approximately one mile away west of the site.

Env Problem: Soil and groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides, metals, cyanide, and per-and poly fluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. The primary contaminants of concern at the site are petroleum-related VOCs and SVOCs in groundwater and VOCs in soil vapor. Metals, pesticides, and polychlorinated biphenyls (PCBs) are present in site-wide soils but not in groundwater. Soil - Following the completion of the on-site IRM several constituents in soil were identified at concentrations in the top 15 feet or just above bedrock but were below the intended Restricted Residential Use SCOs except for one exceedance of lead at 572 ppm. Excavation continued until it was determined unsafe, and this area could not beremoved due to the presence of the northern first floor retaining wall and abundance of bedrock. No VOCs were detected during the RI in soil investigation. The following is a list of those compounds and the maximum exceedances remaining following the excavation IRM: Trivalent chromium detected at 94 ppm versus UUSCO of 30 ppm and below the RRSCO of 180 ppm; nickel was detected at 59.8 ppm versus RRSCO of 310 ppm; lead was detected at 572 ppm versus UUSCO of 63 ppm and the RRSCO of 400 ppm; mercury was detected at 0.75 ppm versus UUSCO 0.18 ppm and below the RRSCO of 0.81 ppm. VOCs, SVOCs, pesticides and PCBs were not detected above the UUSCOs following the IRM activities. Data does not indicate any off-site impacts in soil related to this site. Groundwater Two rounds of groundwater were taken Pre-IRM and Post-IRM. No metals, PCBs or pesticides were detected in filtered or unfiltered groundwater samples in exceedance of groundwater standards except for iron, manganese, and sodium. Iron, manganese, and sodium appear to be background levels with no distinction between upgradient and downgradient monitoring wells. These are naturally occurring or attributable to road salt. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. VOCs and SVOCs were detected above the groundwater standards as noted: benzene was detected at 7.4 ppb and 4.6 ppb exceeding the standard of 1 ppb; toluene was detected at 48 ppb and 17 ppb exceeding the standard of 5 ppb; and ethylbenzene was detected

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

at 300 ppb exceeding the standard of 5 ppb. Total xylenes were detected at 1400 ppb exceeding the standard of 5 ppb. 1,2,4-trimethlybenezene was detected up to 270 ppb and 1,3,5-trimethlybenezene was detected up to 110 ppb exceeding standards of 5 ppb for both. For SVOCs, naphthalene was detected at 83 ppb exceeding the standard of 10 ppb. These concentrations were detected post-IRM near the tank removal. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 78.8 and 8.26 parts per trillion (ppt), respectively, exceeding the 6.7 ppt and 2.7 ppt groundwater quality guidance values. 1,4-dioxane was not detected. It is unlikely off-site migration of the groundwater contamination is affecting the surrounding area. There are several closed spills across McLean Ave. Groundwater wells installed in sidewalk off-site and downgradient of the IRM tank removal did not show any exceedances for VOCs or SVOCs, or any petroleum contamination. Sub-Slab Soil Vapor and Indoor Air - Prior to the IRM, a total of nine sub-slab vapor, four indoor air, and two ambient air samples were collected on-site from within the building and outside and analyzed for VOCs and SVOCs. Primarily petroleum related contaminants were detected in the sub-slab vapor samples. PCE was detected in all nine sub-slab vapor samples collected with a maximum detection of 368 micrograms per cubic meter (ug/m3). PCE was detected in all four indoor air samples collected with a maximum detection of 1.28 ug/m3. Other VOCs detected in sub-slab vapor samples collected included carbon tetrachloride at 10 ug/m3, cyclohexane at 190,000 ug/m3, ethylbenzene at 13,000 ug/m3, n-heptane at 300,000 ug/m3, n-hexane at 280,000 ug/m3, o-xylene at 4,300 ug/m3, m & p xylene at 22,000 ug/m3, and toluene at 4,500 ug/m3. Heptane was detected in the indoor air sample collected near the petroleum tank ramp at 1,320 ug/m3. Toluene was detected at 35.4 ug/m3 in indoor air Based on the concentrations in the soil vapor intrusion samples, a post remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected. As detailed in section 6.2, based on the concentrations in the soil vapor intrusion samples, a post-remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected.

Health Problem: Since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater and/or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion sampling identified impacts in indoor air quality in the on-site building. In addition, sampling indicates soil vapor intrusion is not a concern for off-site buildings.

Dump: False
Structure: False
Lagoon: False

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

| | |
|---|---|
| Landfill: | False |
| Pond: | False |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | Not reported |
| Dell: | Not reported |
| Record Add: | 2021-04-15 13:37:00 |
| Record Upd: | 2024-09-19 11:24:00 |
| Updated By: | MSHUBICK |
| Own Op: | Document Repository |
| Sub Type: | NNN |
| Owner Name: | Anne Campbell |
| Owner Company: | Yonkers Public Library-Riverfront Library |
| Owner Address: | 1 Larkin Center |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | P03 |
| Owner Name: | Kurt Spring |
| Owner Company: | SnL Yonkers, LLC |
| Owner Address: | C/O Equity Resource Investments, LLC |
| Owner Addr2: | 1280 Massachusetts Ave, Suite 400 |
| Owner City,St,Zip: | Cambridge, MA 02138 |
| Owner Country: | United States of America |
| Own Op: | 6 |
| Sub Type: | P03 |
| Owner Name: | Kurt Spring |
| Owner Company: | SNL Yonkers, LLC |
| Owner Address: | Equity Resource Investments, LLC |
| Owner Addr2: | 1280 Massachusetts Avenue, 4th Floor, Suite 400 |
| Owner City,St,Zip: | Cambridge, MA 02138 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | P03 |
| Owner Name: | Michael Colvin |
| Owner Company: | Hampshire Co |
| Owner Address: | 21 South Street |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Morristown, NJ 07960 |
| Owner Country: | United States of America |
| Own Op: | Document Repository |
| Sub Type: | NNN |

Owner Name:

| | |
|---|---|
| Owner Company: | DECInfo Locator |
| Owner Address: | Not reported |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | NY |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | P03 |
| Owner Name: | Scott Dumont |
| Owner Company: | Realty Genesis Co LLC |
| Owner Address: | 1280 Massachusetts Avenue |
| Owner Addr2: | Suite 400 |
| Owner City,St,Zip: | Manchester, MA 02138 |

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

| | |
|---|---|
| Owner Country: | United States of America |
| HW Code: | C360211 |
| Waste Type: | lead |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | benzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | PCB aroclor 1254 |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | heptane |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | mercury |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | naphthalene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | DDT |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | PCB aroclor 1260 |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | 1,3,5-trimethylbenzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | 1,2,4-TMB |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | zinc |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | DDE |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | chromium |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | tetrachloroethene (PCE) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

| | |
|---|---|
| HW Code: | C360211 |
| Waste Type: | hexane |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | nickel |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | ethylbenzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | xylene (mixed) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | toluene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | carbon tetrachloride |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| Crossref ID: | 9310281 |
| Cross Ref Type Code: | 01 |
| Cross Ref Type: | Spill No. |
| Record Added Date: | 2024-09-26 13:14:00 |
| Record Updated: | 2024-09-26 13:14:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | C360211-05-21 |
| Cross Ref Type Code: | 23 |
| Cross Ref Type: | Agreement/Consent Order Number |
| Record Added Date: | 2023-09-14 16:46:00 |
| Record Updated: | 2023-09-14 16:46:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | 631933465 |
| Cross Ref Type Code: | 25 |
| Cross Ref Type: | County Recording Identifier |
| Record Added Date: | 2024-05-21 15:34:00 |
| Record Updated: | 2024-05-21 15:34:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | 05/12/2021 |
| Cross Ref Type Code: | 26 |
| Cross Ref Type: | Agreement/Consent Order Date |
| Record Added Date: | 2023-09-14 16:45:00 |
| Record Updated: | 2023-09-14 16:45:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | 2000623 |
| Cross Ref Type Code: | 01 |
| Cross Ref Type: | Spill No. |
| Record Added Date: | 2021-01-07 13:25:00 |
| Record Updated: | 2021-01-07 13:25:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | 9310281 |
| Cross Ref Type Code: | 30 |
| Cross Ref Type: | SP Site ID |

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Record Added Date: 2021-01-07 11:07:00
Record Updated: 2021-01-07 11:07:00
Updated By: MSHUBICK

INST CONTROL:
Name: 46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE
Address: 48 MCLEAN AVENUE (F/K/A 46-70 MCLEAN AVENUE)
City,State,Zip: YONKERS, NY 10705
Site Code: 615469
Control Name: IC/EC Plan
HW Code: C360211
Control Code: 34
Control Type: INST
Dt record added: 09/26/2024
Dt rec updated: 02/10/2025
Updated By: MSHUBICK
Site Code: 615469
Site Description: Site Location: The site is 0.87-acre corner lot located between two city parks, Leslie Sutherland Park to the North and Pelton Oval Park to the northeast. McLean Avenue runs along the southern border, and Van Cortlandt Park Avenue runs along the eastern border. Site Features: A vacant on-site building covers most of the site. The building interior has been demolished to allow for investigation, remediation as an Interim Remedial Measure (IRM), and stabilizing the exterior walls. The facade of the building and fencing remains around the site. The perimeter of the site is covered by a concrete and asphalt sidewalk and walkway. The building has been vacated since April 2022 by the previous tenants to allow investigation and demolition to begin. The first-floor slab and vapor barrier have been installed. A portion of the second floor is built into the hillside. The portion of the second floor built into the hillside requires a slab and a vapor barrier. Though not required by the Department, vapor extraction points were pre-emptively installed in the first floor of the partially constructed building and are proposed to be installed in the second floor upon completion of the building. Extraction points were installed instead of laterals due to the presence of shallow bedrock and perched groundwater beneath the building slab. A vapor barrier has also been installed beneath both floors of the building. Current Zoning and Land Use: The site is located in a Commercial District (CM) zoning district, which allows for commercial use. The CM is consistent with the proposed use as the CM permits use as a self-storage warehouse. Past Use of the Site: The site historically operated as an auto repair and service station from 1987 to April 2022 on the first level with various uses since the 1950 s (e.g., printing, metal manufacturing, sports manufacturer, laundry). The lower level of the site was separated into eight units in 1956. The second floor was used for heat sealing to customize jerseys, sweatshirts and performance wear. Previously, the area was predominantly inactive storage space which included collectible dolls and toys, frames, leather goods, office supplies, and antiquated printing machines. There was an inactive 5,000-gallon fuel oil underground storage tank in the southeastern portion of the site beneath a ramp. This tank was removed during the IRM conducted in October 2022 and properly closed out per local and state regulations. Documentation is provided in the IRM completion report. Site Geology and Hydrogeology: According to a 2018 Phase I and an April 2020 Phase II investigation, bedrock outcrops are located to the north of the

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

site. Geotechnical and subsurface investigations have determined the building was constructed into bedrock, which is present 1 to 5 feet (ft.) below surface grade. Surface grade is 80 to 90 ft. above mean sea level. Groundwater depth varied across the site from approximately 1 ft. below ground surface (bgs.) at the northern/central portion to approximately 16 ft. bgs in the southeast corner of the site. Groundwater generally flows towards the southwest, to the Hudson River approximately one mile away west of the site.

Env Problem: Soil and groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides, metals, cyanide, and per-and poly fluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. The primary contaminants of concern at the site are petroleum-related VOCs and SVOCs in groundwater and VOCs in soil vapor. Metals, pesticides, and polychlorinated biphenyls (PCBs) are present in site-wide soils but not in groundwater. Soil - Following the completion of the on-site IRM several constituents in soil were identified at concentrations in the top 15 feet or just above bedrock but were below the intended Restricted Residential Use SCOs except for one exceedance of lead at 572 ppm. Excavation continued until it was determined unsafe, and this area could not beremoved due to the presence of the northern first floor retaining wall and abundance of bedrock. No VOCs were detected during the RI in soil investigation. The following is a list of those compounds and the maximum exceedances remaining following the excavation IRM: Trivalent chromium detected at 94 ppm versus UUSCO of 30 ppm and below the RRSCO of 180 ppm; nickel was detected at 59.8 ppm versus RRSCO of 310 ppm; lead was detected at 572 ppm versus UUSCO of 63 ppm and the RRSCO of 400 ppm; mercury was detected at 0.75 ppm versus UUSCO 0.18 ppm and below the RRSCO of 0.81 ppm. VOCs, SVOCs, pesticides and PCBs were not detected above the UUSCOs following the IRM activities. Data does not indicate any off-site impacts in soil related to this site. Groundwater Two rounds of groundwater were taken Pre-IRM and Post-IRM. No metals, PCBs or pesticides were detected in filtered or unfiltered groundwater samples in exceedance of groundwater standards except for iron, manganese, and sodium. Iron, manganese, and sodium appear to be background levels with no distinction between upgradient and downgradient monitoring wells. These are naturally occurring or attributable to road salt. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. VOCs and SVOCs were detected above the groundwater standards as noted: benzene was detected at 7.4 ppb and 4.6 ppb exceeding the standard of 1 ppb; toluene was detected at 48 ppb and 17 ppb exceeding the standard of 5 ppb; and ethylbenzene was detected at 300 ppb exceeding the standard of 5 ppb. Total xylenes were detected at 1400 ppb exceeding the standard of 5 ppb. 1,2,4-trimethlybenezene was detected up to 270 ppb and 1,3,5-trimethlybenezene was detected up to 110 ppb exceeding standards of 5 ppb for both. For SVOCs, naphthalene was detected at 83 ppb exceeding the standard of 10 ppb. These concentrations were detected post-IRM near the tank removal. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 78.8 and 8.26 parts per trillion (ppt), respectively, exceeding the 6.7 ppt and 2.7 ppt groundwater quality guidance values. 1,4-dioxane was not detected. It

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

is unlikely off-site migration of the groundwater contamination is affecting the surrounding area. There are several closed spills across McLean Ave. Groundwater wells installed in sidewalk off-site and downgradient of the IRM tank removal did not show any exceedances for VOCs or SVOCs, or any petroleum contamination. Sub-Slab Soil Vapor and Indoor Air - Prior to the IRM, a total of nine sub-slab vapor, four indoor air, and two ambient air samples were collected on-site from within the building and outside and analyzed for VOCs and SVOCs. Primarily petroleum related contaminants were detected in the sub-slab vapor samples. PCE was detected in all nine sub-slab vapor samples collected with a maximum detection of 368 micrograms per cubic meter (ug/m3). PCE was detected in all four indoor air samples collected with a maximum detection of 1.28 ug/m3. Other VOCs detected in sub-slab vapor samples collected included carbon tetrachloride at 10 ug/m3, cyclohexane at 190,000 ug/m3, ethylbenzene at 13,000 ug/m3, n-heptane at 300,000 ug/m3, n-hexane at 280,000 ug/m3, o-xylene at 4,300 ug/m3, m & p xylene at 22,000 ug/m3, and toluene at 4,500 ug/m3. Heptane was detected in the indoor air sample collected near the petroleum tank ramp at 1,320 ug/m3. Toluene was detected at 35.4 ug/m3 in indoor air Based on the concentrations in the soil vapor intrusion samples, a post remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected. As detailed in section 6.2, based on the concentrations in the soil vapor intrusion samples, a post-remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected.

Health Problem: Since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater and/or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion sampling identified impacts in indoor air quality in the on-site building. In addition, sampling indicates soil vapor intrusion is not a concern for off-site buildings.

Dump: False
Structure: False
Lagoon: False
Landfill: False
Pond: False
Disp Start: Not reported
Disp Term: Not reported
Lat/Long: Not reported
Dell: Not reported
Record Add: 2021-04-15 13:37:00
Record Upd: 2024-09-19 11:24:00
Updated By: MSHUBICK
Own Op: Document Repository
Sub Type: NNN
Owner Name: Anne Campbell
Owner Company: Yonkers Public Library-Riverfront Library

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Owner Address: 1 Larkin Center
Owner Addr2: Not reported
Owner City,St,Zip: Yonkers, NY 10701
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SnL Yonkers, LLC
Owner Address: C/O Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Ave, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 6
Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SNL Yonkers, LLC
Owner Address: Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Avenue, 4th Floor, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Michael Colvin
Owner Company: Hampshire Co
Owner Address: 21 South Street
Owner Addr2: Not reported
Owner City,St,Zip: Morristown, NJ 07960
Owner Country: United States of America
Own Op: Document Repository
Sub Type: NNN

Owner Name:
Owner Company: DECInfo Locator
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: NY
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Scott Dumont
Owner Company: Realty Genesis Co LLC
Owner Address: 1280 Massachusetts Avenue
Owner Addr2: Suite 400
Owner City,St,Zip: Manchester, MA 02138
Owner Country: United States of America
HW Code: C360211
Waste Type: lead
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: benzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1254
Waste Quantity: UNKNOWN
Waste Code: Not reported

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

HW Code: C360211
Waste Type: heptane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: mercury
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: naphthalene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDT
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1260
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,3,5-trimethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,2,4-TMB
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: zinc
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: chromium
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: tetrachloroethene (PCE)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: hexane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: nickel
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: ethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Waste Type: xylene (mixed)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: toluene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: carbon tetrachloride
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: 9310281
Cross Ref Type Code: 01
Cross Ref Type: Spill No.
Record Added Date: 2024-09-26 13:14:00
Record Updated: 2024-09-26 13:14:00
Updated By: MSHUBICK
Crossref ID: C360211-05-21
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2023-09-14 16:46:00
Record Updated: 2023-09-14 16:46:00
Updated By: MSHUBICK
Crossref ID: 631933465
Cross Ref Type Code: 25
Cross Ref Type: County Recording Identifier
Record Added Date: 2024-05-21 15:34:00
Record Updated: 2024-05-21 15:34:00
Updated By: MSHUBICK
Crossref ID: 05/12/2021
Cross Ref Type Code: 26
Cross Ref Type: Agreement/Consent Order Date
Record Added Date: 2023-09-14 16:45:00
Record Updated: 2023-09-14 16:45:00
Updated By: MSHUBICK
Crossref ID: 2000623
Cross Ref Type Code: 01
Cross Ref Type: Spill No.
Record Added Date: 2021-01-07 13:25:00
Record Updated: 2021-01-07 13:25:00
Updated By: MSHUBICK
Crossref ID: 9310281
Cross Ref Type Code: 30
Cross Ref Type: SP Site ID
Record Added Date: 2021-01-07 11:07:00
Record Updated: 2021-01-07 11:07:00
Updated By: MSHUBICK

Name: 46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE
Address: 48 MCLEAN AVENUE (F/K/A 46-70 MCLEAN AVENUE)
City,State,Zip: YONKERS, NY 10705
Site Code: 615469
Control Name: Landuse Restriction
HW Code: C360211
Control Code: 25
Control Type: INST
Dt record added: 09/26/2024

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Dt rec updated: 02/10/2025
Updated By: MSHUBICK
Site Code: 615469
Site Description: Site Location: The site is 0.87-acre corner lot located between two city parks, Leslie Sutherland Park to the North and Pelton Oval Park to the northeast. McLean Avenue runs along the southern border, and Van Cortlandt Park Avenue runs along the eastern border. Site Features: A vacant on-site building covers most of the site. The building interior has been demolished to allow for investigation, remediation as an Interim Remedial Measure (IRM), and stabilizing the exterior walls. The facade of the building and fencing remains around the site. The perimeter of the site is covered by a concrete and asphalt sidewalk and walkway. The building has been vacated since April 2022 by the previous tenants to allow investigation and demolition to begin. The first-floor slab and vapor barrier have been installed. A portion of the second floor is built into the hillside. The portion of the second floor built into the hillside requires a slab and a vapor barrier. Though not required by the Department, vapor extraction points were pre-emptively installed in the first floor of the partially constructed building and are proposed to be installed in the second floor upon completion of the building. Extraction points were installed instead of laterals due to the presence of shallow bedrock and perched groundwater beneath the building slab. A vapor barrier has also been installed beneath both floors of the building. Current Zoning and Land Use: The site is located in a Commercial District (CM) zoning district, which allows for commercial use. The CM is consistent with the proposed use as the CM permits use as a self-storage warehouse. Past Use of the Site: The site historically operated as an auto repair and service station from 1987 to April 2022 on the first level with various uses since the 1950 s (e.g., printing, metal manufacturing, sports manufacturer, laundry). The lower level of the site was separated into eight units in 1956. The second floor was used for heat sealing to customize jerseys, sweatshirts and performance wear. Previously, the area was predominantly inactive storage space which included collectible dolls and toys, frames, leather goods, office supplies, and antiquated printing machines. There was an inactive 5,000-gallon fuel oil underground storage tank in the southeastern portion of the site beneath a ramp. This tank was removed during the IRM conducted in October 2022 and properly closed out per local and state regulations. Documentation is provided in the IRM completion report. Site Geology and Hydrogeology: According to a 2018 Phase I and an April 2020 Phase II investigation, bedrock outcrops are located to the north of the site. Geotechnical and subsurface investigations have determined the building was constructed into bedrock, which is present 1 to 5 feet (ft.) below surface grade. Surface grade is 80 to 90 ft. above mean sea level. Groundwater depth varied across the site from approximately 1 ft. below ground surface (bgs.) at the northern/central portion to approximately 16 ft. bgs in the southeast corner of the site. Groundwater generally flows towards the southwest, to the Hudson River approximately one mile away west of the site.
Env Problem: Soil and groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides, metals, cyanide, and per-and poly fluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. The primary contaminants of concern at the site are petroleum-related VOCs and SVOCs in groundwater and VOCs in soil vapor. Metals,

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

pesticides, and polychlorinated biphenyls (PCBs) are present in site-wide soils but not in groundwater. Soil - Following the completion of the on-site IRM several constituents in soil were identified at concentrations in the top 15 feet or just above bedrock but were below the intended Restricted Residential Use SCOs except for one exceedance of lead at 572 ppm. Excavation continued until it was determined unsafe, and this area could not beremoved due to the presence of the northern first floor retaining wall and abundance of bedrock. No VOCs were detected during the RI in soil investigation. The following is a list of those compounds and the maximum exceedances remaining following the excavation IRM: Trivalent chromium detected at 94 ppm versus UUSCO of 30 ppm and below the RRSCO of 180 ppm; nickel was detected at 59.8 ppm versus RRSCO of 310 ppm; lead was detected at 572 ppm versus UUSCO of 63 ppm and the RRSCO of 400 ppm; mercury was detected at 0.75 ppm versus UUSCO 0.18 ppm and below the RRSCO of 0.81 ppm. VOCs, SVOCs, pesticides and PCBs were not detected above the UUSCOs following the IRM activities. Data does not indicate any off-site impacts in soil related to this site. Groundwater Two rounds of groundwater were taken Pre-IRM and Post-IRM. No metals, PCBs or pesticides were detected in filtered or unfiltered groundwater samples in exceedance of groundwater standards except for iron, manganese, and sodium. Iron, manganese, and sodium appear to be background levels with no distinction between upgradient and downgradient monitoring wells. These are naturally occurring or attributable to road salt. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. VOCs and SVOCs were detected above the groundwater standards as noted: benzene was detected at 7.4 ppb and 4.6 ppb exceeding the standard of 1 ppb; toluene was detected at 48 ppb and 17 ppb exceeding the standard of 5 ppb; and ethylbenzene was detected at 300 ppb exceeding the standard of 5 ppb. Total xylenes were detected at 1400 ppb exceeding the standard of 5 ppb. 1,2,4-trimethlybenezene was detected up to 270 ppb and 1,3,5-trimethlybenezene was detected up to 110 ppb exceeding standards of 5 ppb for both. For SVOCs, naphthalene was detected at 83 ppb exceeding the standard of 10 ppb. These concentrations were detected post-IRM near the tank removal. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 78.8 and 8.26 parts per trillion (ppt), respectively, exceeding the 6.7 ppt and 2.7 ppt groundwater quality guidance values. 1,4-dioxane was not detected. It is unlikely off-site migration of the groundwater contamination is affecting the surrounding area. There are several closed spills across McLean Ave. Groundwater wells installed in sidewalk off-site and downgradient of the IRM tank removal did not show any exceedances for VOCs or SVOCs, or any petroleum contamination. Sub-Slab Soil Vapor and Indoor Air - Prior to the IRM, a total of nine sub-slab vapor, four indoor air, and two ambient air samples were collected on-site from within the building and outside and analyzed for VOCs and SVOCs. Primarily petroleum related contaminants were detected in the sub-slab vapor samples. PCE was detected in all nine sub-slab vapor samples collected with a maximum detection of 368 micrograms per cubic meter (ug/m3). PCE was detected in all four indoor air samples collected with a maximum detection of 1.28 ug/m3. Other VOCs detected in sub-slab vapor samples collected included carbon

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

tetrachloride at 10 ug/m3, cyclohexane at 190,000 ug/m3, ethylbenzene at 13,000 ug/m3, n-heptane at 300,000 ug/m3, n-hexane at 280,000 ug/m3, o-xylene at 4,300 ug/m3, m & p xylene at 22,000 ug/m3, and toluene at 4,500 ug/m3. Heptane was detected in the indoor air sample collected near the petroleum tank ramp at 1,320 ug/m3. Toluene was detected at 35.4 ug/m3 in indoor air Based on the concentrations in the soil vapor intrusion samples, a post remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected. As detailed in section 6.2, based on the concentrations in the soil vapor intrusion samples, a post-remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected.

Health Problem: Since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater and/or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion sampling identified impacts in indoor air quality in the on-site building. In addition, sampling indicates soil vapor intrusion is not a concern for off-site buildings.

Dump: False
Structure: False
Lagoon: False
Landfill: False
Pond: False
Disp Start: Not reported
Disp Term: Not reported
Lat/Long: Not reported
Dell: Not reported
Record Add: 2021-04-15 13:37:00
Record Upd: 2024-09-19 11:24:00
Updated By: MSHUBICK
Own Op: Document Repository
Sub Type: NNN
Owner Name: Anne Campbell
Owner Company: Yonkers Public Library-Riverfront Library
Owner Address: 1 Larkin Center
Owner Addr2: Not reported
Owner City,St,Zip: Yonkers, NY 10701
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SnL Yonkers, LLC
Owner Address: C/O Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Ave, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 6
Sub Type: P03

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Owner Name: Kurt Spring
Owner Company: SNL Yonkers, LLC
Owner Address: Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Avenue, 4th Floor, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Michael Colvin
Owner Company: Hampshire Co
Owner Address: 21 South Street
Owner Addr2: Not reported
Owner City,St,Zip: Morristown, NJ 07960
Owner Country: United States of America
Own Op: Document Repository
Sub Type: NNN

Owner Name:
Owner Company: DECInfo Locator
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: NY
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Scott Dumont
Owner Company: Realty Genesis Co LLC
Owner Address: 1280 Massachusetts Avenue
Owner Addr2: Suite 400
Owner City,St,Zip: Manchester, MA 02138
Owner Country: United States of America
HW Code: C360211
Waste Type: lead
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: benzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1254
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: heptane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: mercury
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: naphthalene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDT

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1260
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,3,5-trimethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,2,4-TMB
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: zinc
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: chromium
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: tetrachloroethene (PCE)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: hexane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: nickel
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: ethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: xylene (mixed)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: toluene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: carbon tetrachloride
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: 9310281
Cross Ref Type Code: 01
Cross Ref Type: Spill No.

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Record Added Date: 2024-09-26 13:14:00
Record Updated: 2024-09-26 13:14:00
Updated By: MSHUBICK
Crossref ID: C360211-05-21
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2023-09-14 16:46:00
Record Updated: 2023-09-14 16:46:00
Updated By: MSHUBICK
Crossref ID: 631933465
Cross Ref Type Code: 25
Cross Ref Type: County Recording Identifier
Record Added Date: 2024-05-21 15:34:00
Record Updated: 2024-05-21 15:34:00
Updated By: MSHUBICK
Crossref ID: 05/12/2021
Cross Ref Type Code: 26
Cross Ref Type: Agreement/Consent Order Date
Record Added Date: 2023-09-14 16:45:00
Record Updated: 2023-09-14 16:45:00
Updated By: MSHUBICK
Crossref ID: 2000623
Cross Ref Type Code: 01
Cross Ref Type: Spill No.
Record Added Date: 2021-01-07 13:25:00
Record Updated: 2021-01-07 13:25:00
Updated By: MSHUBICK
Crossref ID: 9310281
Cross Ref Type Code: 30
Cross Ref Type: SP Site ID
Record Added Date: 2021-01-07 11:07:00
Record Updated: 2021-01-07 11:07:00
Updated By: MSHUBICK

Name: 46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE
Address: 48 MCLEAN AVENUE (F/K/A 46-70 MCLEAN AVENUE)
City,State,Zip: YONKERS, NY 10705
Site Code: 615469
Control Name: Site Management Plan
HW Code: C360211
Control Code: 32
Control Type: INST
Dt record added: 09/26/2024
Dt rec updated: 02/10/2025
Updated By: MSHUBICK
Site Code: 615469
Site Description: Site Location: The site is 0.87-acre corner lot located between two city parks, Leslie Sutherland Park to the North and Pelton Oval Park to the northeast. McLean Avenue runs along the southern border, and Van Cortlandt Park Avenue runs along the eastern border. Site Features: A vacant on-site building covers most of the site. The building interior has been demolished to allow for investigation, remediation as an Interim Remedial Measure (IRM), and stabilizing the exterior walls. The facade of the building and fencing remains around the site. The perimeter of the site is covered by a concrete and asphalt sidewalk and walkway. The building has been vacated since April 2022 by the previous tenants to allow investigation and

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

demolition to begin. The first-floor slab and vapor barrier have been installed. A portion of the second floor is built into the hillside. The portion of the second floor built into the hillside requires a slab and a vapor barrier. Though not required by the Department, vapor extraction points were pre-emptively installed in the first floor of the partially constructed building and are proposed to be installed in the second floor upon completion of the building. Extraction points were installed instead of laterals due to the presence of shallow bedrock and perched groundwater beneath the building slab. A vapor barrier has also been installed beneath both floors of the building. Current Zoning and Land Use: The site is located in a Commercial District (CM) zoning district, which allows for commercial use. The CM is consistent with the proposed use as the CM permits use as a self-storage warehouse. Past Use of the Site: The site historically operated as an auto repair and service station from 1987 to April 2022 on the first level with various uses since the 1950 s (e.g., printing, metal manufacturing, sports manufacturer, laundry). The lower level of the site was separated into eight units in 1956. The second floor was used for heat sealing to customize jerseys, sweatshirts and performance wear. Previously, the area was predominantly inactive storage space which included collectible dolls and toys, frames, leather goods, office supplies, and antiquated printing machines. There was an inactive 5,000-gallon fuel oil underground storage tank in the southeastern portion of the site beneath a ramp. This tank was removed during the IRM conducted in October 2022 and properly closed out per local and state regulations. Documentation is provided in the IRM completion report. Site Geology and Hydrogeology: According to a 2018 Phase I and an April 2020 Phase II investigation, bedrock outcrops are located to the north of the site. Geotechnical and subsurface investigations have determined the building was constructed into bedrock, which is present 1 to 5 feet (ft.) below surface grade. Surface grade is 80 to 90 ft. above mean sea level. Groundwater depth varied across the site from approximately 1 ft. below ground surface (bgs.) at the northern/central portion to approximately 16 ft. bgs in the southeast corner of the site. Groundwater generally flows towards the southwest, to the Hudson River approximately one mile away west of the site.

Env Problem: Soil and groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides, metals, cyanide, and per-and poly fluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. The primary contaminants of concern at the site are petroleum-related VOCs and SVOCs in groundwater and VOCs in soil vapor. Metals, pesticides, and polychlorinated biphenyls (PCBs) are present in site-wide soils but not in groundwater. Soil - Following the completion of the on-site IRM several constituents in soil were identified at concentrations in the top 15 feet or just above bedrock but were below the intended Restricted Residential Use SCOs except for one exceedance of lead at 572 ppm. Excavation continued until it was determined unsafe, and this area could not beremoved due to the presence of the northern first floor retaining wall and abundance of bedrock. No VOCs were detected during the RI in soil investigation. The following is a list of those compounds and the maximum exceedances remaining following the excavation IRM: Trivalent chromium detected at 94 ppm versus UUSCO of 30 ppm and below the RRSCO of 180 ppm; nickel was detected at 59.8 ppm versus RRSCO of 310 ppm; lead was detected at 572 ppm versus UUSCO of 63 ppm and the

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

RRSCO of 400 ppm; mercury was detected at 0.75 ppm versus UUSCO 0.18 ppm and below the RRSCO of 0.81 ppm. VOCs, SVOCs, pesticides and PCBs were not detected above the UUSCOs following the IRM activities. Data does not indicate any off-site impacts in soil related to this site. Groundwater Two rounds of groundwater were taken Pre-IRM and Post-IRM. No metals, PCBs or pesticides were detected in filtered or unfiltered groundwater samples in exceedance of groundwater standards except for iron, manganese, and sodium. Iron, manganese, and sodium appear to be background levels with no distinction between upgradient and downgradient monitoring wells. These are naturally occurring or attributable to road salt. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. VOCs and SVOCs were detected above the groundwater standards as noted: benzene was detected at 7.4 ppb and 4.6 ppb exceeding the standard of 1 ppb; toluene was detected at 48 ppb and 17 ppb exceeding the standard of 5 ppb; and ethylbenzene was detected at 300 ppb exceeding the standard of 5 ppb. Total xylenes were detected at 1400 ppb exceeding the standard of 5 ppb. 1,2,4-trimethlybenezene was detected up to 270 ppb and 1,3,5-trimethlybenezene was detected up to 110 ppb exceeding standards of 5 ppb for both. For SVOCs, naphthalene was detected at 83 ppb exceeding the standard of 10 ppb. These concentrations were detected post-IRM near the tank removal. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 78.8 and 8.26 parts per trillion (ppt), respectively, exceeding the 6.7 ppt and 2.7 ppt groundwater quality guidance values. 1,4-dioxane was not detected. It is unlikely off-site migration of the groundwater contamination is affecting the surrounding area. There are several closed spills across McLean Ave. Groundwater wells installed in sidewalk off-site and downgradient of the IRM tank removal did not show any exceedances for VOCs or SVOCs, or any petroleum contamination. Sub-Slab Soil Vapor and Indoor Air - Prior to the IRM, a total of nine sub-slab vapor, four indoor air, and two ambient air samples were collected on-site from within the building and outside and analyzed for VOCs and SVOCs. Primarily petroleum related contaminants were detected in the sub-slab vapor samples. PCE was detected in all nine sub-slab vapor samples collected with a maximum detection of 368 micrograms per cubic meter (ug/m3). PCE was detected in all four indoor air samples collected with a maximum detection of 1.28 ug/m3. Other VOCs detected in sub-slab vapor samples collected included carbon tetrachloride at 10 ug/m3, cyclohexane at 190,000 ug/m3, ethylbenzene at 13,000 ug/m3, n-heptane at 300,000 ug/m3, n-hexane at 280,000 ug/m3, o-xylene at 4,300 ug/m3, m & p xylene at 22,000 ug/m3, and toluene at 4,500 ug/m3. Heptane was detected in the indoor air sample collected near the petroleum tank ramp at 1,320 ug/m3. Toluene was detected at 35.4 ug/m3 in indoor air Based on the concentrations in the soil vapor intrusion samples, a post remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected. As detailed in section 6.2, based on the concentrations in the soil vapor intrusion samples, a post-remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected.

Health Problem: Since the site is fenced and covered by asphalt or concrete, people

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater and/or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion sampling identified impacts in indoor air quality in the on-site building. In addition, sampling indicates soil vapor intrusion is not a concern for off-site buildings.

Dump: False
Structure: False
Lagoon: False
Landfill: False
Pond: False
Disp Start: Not reported
Disp Term: Not reported
Lat/Long: Not reported
Dell: Not reported
Record Add: 2021-04-15 13:37:00
Record Upd: 2024-09-19 11:24:00
Updated By: MSHUBICK
Own Op: Document Repository
Sub Type: NNN
Owner Name: Anne Campbell
Owner Company: Yonkers Public Library-Riverfront Library
Owner Address: 1 Larkin Center
Owner Addr2: Not reported
Owner City,St,Zip: Yonkers, NY 10701
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SnL Yonkers, LLC
Owner Address: C/O Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Ave, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 6
Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SNL Yonkers, LLC
Owner Address: Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Avenue, 4th Floor, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Michael Colvin
Owner Company: Hampshire Co
Owner Address: 21 South Street
Owner Addr2: Not reported
Owner City,St,Zip: Morristown, NJ 07960
Owner Country: United States of America

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Own Op: Document Repository
Sub Type: NNN

Owner Name:
Owner Company: DECInfo Locator
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: NY
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Scott Dumont
Owner Company: Realty Genesis Co LLC
Owner Address: 1280 Massachusetts Avenue
Owner Addr2: Suite 400
Owner City,St,Zip: Manchester, MA 02138
Owner Country: United States of America
HW Code: C360211
Waste Type: lead
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: benzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1254
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: heptane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: mercury
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: naphthalene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDT
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1260
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,3,5-trimethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,2,4-TMB
Waste Quantity: UNKNOWN
Waste Code: Not reported

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

HW Code: C360211
Waste Type: zinc
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: chromium
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: tetrachloroethene (PCE)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: hexane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: nickel
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: ethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: xylene (mixed)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: toluene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: carbon tetrachloride
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: 9310281
Cross Ref Type Code: 01
Cross Ref Type: Spill No.
Record Added Date: 2024-09-26 13:14:00
Record Updated: 2024-09-26 13:14:00
Updated By: MSHUBICK
Crossref ID: C360211-05-21
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2023-09-14 16:46:00
Record Updated: 2023-09-14 16:46:00
Updated By: MSHUBICK
Crossref ID: 631933465
Cross Ref Type Code: 25
Cross Ref Type: County Recording Identifier
Record Added Date: 2024-05-21 15:34:00
Record Updated: 2024-05-21 15:34:00

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Updated By: MSHUBICK
Crossref ID: 05/12/2021
Cross Ref Type Code: 26
Cross Ref Type: Agreement/Consent Order Date
Record Added Date: 2023-09-14 16:45:00
Record Updated: 2023-09-14 16:45:00
Updated By: MSHUBICK
Crossref ID: 2000623
Cross Ref Type Code: 01
Cross Ref Type: Spill No.
Record Added Date: 2021-01-07 13:25:00
Record Updated: 2021-01-07 13:25:00
Updated By: MSHUBICK
Crossref ID: 9310281
Cross Ref Type Code: 30
Cross Ref Type: SP Site ID
Record Added Date: 2021-01-07 11:07:00
Record Updated: 2021-01-07 11:07:00
Updated By: MSHUBICK

Name: 46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE
Address: 48 MCLEAN AVENUE (F/K/A 46-70 MCLEAN AVENUE)
City,State,Zip: YONKERS, NY 10705
Site Code: 615469
Control Name: Ground Water Use Restriction
HW Code: C360211
Control Code: 08
Control Type: INST
Dt record added: 09/26/2024
Dt rec updated: 02/10/2025
Updated By: MSHUBICK
Site Code: 615469
Site Description: Site Location: The site is 0.87-acre corner lot located between two city parks, Leslie Sutherland Park to the North and Pelton Oval Park to the northeast. McLean Avenue runs along the southern border, and Van Cortlandt Park Avenue runs along the eastern border. Site Features: A vacant on-site building covers most of the site. The building interior has been demolished to allow for investigation, remediation as an Interim Remedial Measure (IRM), and stabilizing the exterior walls. The facade of the building and fencing remains around the site. The perimeter of the site is covered by a concrete and asphalt sidewalk and walkway. The building has been vacated since April 2022 by the previous tenants to allow investigation and demolition to begin. The first-floor slab and vapor barrier have been installed. A portion of the second floor is built into the hillside. The portion of the second floor built into the hillside requires a slab and a vapor barrier. Though not required by the Department, vapor extraction points were pre-emptively installed in the first floor of the partially constructed building and are proposed to be installed in the second floor upon completion of the building. Extraction points were installed instead of laterals due to the presence of shallow bedrock and perched groundwater beneath the building slab. A vapor barrier has also been installed beneath both floors of the building. Current Zoning and Land Use: The site is located in a Commercial District (CM) zoning district, which allows for commercial use. The CM is consistent with the proposed use as the CM permits use as a self-storage warehouse. Past Use of the Site: The

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

site historically operated as an auto repair and service station from 1987 to April 2022 on the first level with various uses since the 1950 s (e.g., printing, metal manufacturing, sports manufacturer, laundry). The lower level of the site was separated into eight units in 1956. The second floor was used for heat sealing to customize jerseys, sweatshirts and performance wear. Previously, the area was predominantly inactive storage space which included collectible dolls and toys, frames, leather goods, office supplies, and antiquated printing machines. There was an inactive 5,000-gallon fuel oil underground storage tank in the southeastern portion of the site beneath a ramp. This tank was removed during the IRM conducted in October 2022 and properly closed out per local and state regulations. Documentation is provided in the IRM completion report. Site Geology and Hydrogeology: According to a 2018 Phase I and an April 2020 Phase II investigation, bedrock outcrops are located to the north of the site. Geotechnical and subsurface investigations have determined the building was constructed into bedrock, which is present 1 to 5 feet (ft.) below surface grade. Surface grade is 80 to 90 ft. above mean sea level. Groundwater depth varied across the site from approximately 1 ft. below ground surface (bgs.) at the northern/central portion to approximately 16 ft. bgs in the southeast corner of the site. Groundwater generally flows towards the southwest, to the Hudson River approximately one mile away west of the site.

Env Problem: Soil and groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides, metals, cyanide, and per-and poly fluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. The primary contaminants of concern at the site are petroleum-related VOCs and SVOCs in groundwater and VOCs in soil vapor. Metals, pesticides, and polychlorinated biphenyls (PCBs) are present in site-wide soils but not in groundwater. Soil - Following the completion of the on-site IRM several constituents in soil were identified at concentrations in the top 15 feet or just above bedrock but were below the intended Restricted Residential Use SCOs except for one exceedance of lead at 572 ppm. Excavation continued until it was determined unsafe, and this area could not beremoved due to the presence of the northern first floor retaining wall and abundance of bedrock. No VOCs were detected during the RI in soil investigation. The following is a list of those compounds and the maximum exceedances remaining following the excavation IRM: Trivalent chromium detected at 94 ppm versus UUSCO of 30 ppm and below the RRSCO of 180 ppm; nickel was detected at 59.8 ppm versus RRSCO of 310 ppm; lead was detected at 572 ppm versus UUSCO of 63 ppm and the RRSCO of 400 ppm; mercury was detected at 0.75 ppm versus UUSCO 0.18 ppm and below the RRSCO of 0.81 ppm. VOCs, SVOCs, pesticides and PCBs were not detected above the UUSCOs following the IRM activities. Data does not indicate any off-site impacts in soil related to this site. Groundwater Two rounds of groundwater were taken Pre-IRM and Post-IRM. No metals, PCBs or pesticides were detected in filtered or unfiltered groundwater samples in exceedance of groundwater standards except for iron, manganese, and sodium. Iron, manganese, and sodium appear to be background levels with no distinction between upgradient and downgradient monitoring wells. These are naturally occurring or attributable to road salt. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. VOCs and SVOCs were detected above the groundwater standards as noted: benzene was detected at 7.4 ppb and 4.6 ppb

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

exceeding the standard of 1 ppb; toluene was detected at 48 ppb and 17 ppb exceeding the standard of 5 ppb; and ethylbenzene was detected at 300 ppb exceeding the standard of 5 ppb. Total xylenes were detected at 1400 ppb exceeding the standard of 5 ppb. 1,2,4-trimethlybenezene was detected up to 270 ppb and 1,3,5-trimethlybenezene was detected up to 110 ppb exceeding standards of 5 ppb for both. For SVOCs, naphthalene was detected at 83 ppb exceeding the standard of 10 ppb. These concentrations were detected post-IRM near the tank removal. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 78.8 and 8.26 parts per trillion (ppt), respectively, exceeding the 6.7 ppt and 2.7 ppt groundwater quality guidance values. 1,4-dioxane was not detected. It is unlikely off-site migration of the groundwater contamination is affecting the surrounding area. There are several closed spills across McLean Ave. Groundwater wells installed in sidewalk off-site and downgradient of the IRM tank removal did not show any exceedances for VOCs or SVOCs, or any petroleum contamination. Sub-Slab Soil Vapor and Indoor Air - Prior to the IRM, a total of nine sub-slab vapor, four indoor air, and two ambient air samples were collected on-site from within the building and outside and analyzed for VOCs and SVOCs. Primarily petroleum related contaminants were detected in the sub-slab vapor samples. PCE was detected in all nine sub-slab vapor samples collected with a maximum detection of 368 micrograms per cubic meter (ug/m3). PCE was detected in all four indoor air samples collected with a maximum detection of 1.28 ug/m3. Other VOCs detected in sub-slab vapor samples collected included carbon tetrachloride at 10 ug/m3, cyclohexane at 190,000 ug/m3, ethylbenzene at 13,000 ug/m3, n-heptane at 300,000 ug/m3, n-hexane at 280,000 ug/m3, o-xylene at 4,300 ug/m3, m & p xylene at 22,000 ug/m3, and toluene at 4,500 ug/m3. Heptane was detected in the indoor air sample collected near the petroleum tank ramp at 1,320 ug/m3. Toluene was detected at 35.4 ug/m3 in indoor air Based on the concentrations in the soil vapor intrusion samples, a post remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected. As detailed in section 6.2, based on the concentrations in the soil vapor intrusion samples, a post-remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected.

Health Problem: Since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater and/or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion sampling identified impacts in indoor air quality in the on-site building. In addition, sampling indicates soil vapor intrusion is not a concern for off-site buildings.

Dump: False

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Structure: False
Lagoon: False
Landfill: False
Pond: False
Disp Start: Not reported
Disp Term: Not reported
Lat/Long: Not reported
Dell: Not reported
Record Add: 2021-04-15 13:37:00
Record Upd: 2024-09-19 11:24:00
Updated By: MSHUBICK
Own Op: Document Repository
Sub Type: NNN
Owner Name: Anne Campbell
Owner Company: Yonkers Public Library-Riverfront Library
Owner Address: 1 Larkin Center
Owner Addr2: Not reported
Owner City,St,Zip: Yonkers, NY 10701
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SnL Yonkers, LLC
Owner Address: C/O Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Ave, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 6
Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SNL Yonkers, LLC
Owner Address: Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Avenue, 4th Floor, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Michael Colvin
Owner Company: Hampshire Co
Owner Address: 21 South Street
Owner Addr2: Not reported
Owner City,St,Zip: Morristown, NJ 07960
Owner Country: United States of America
Own Op: Document Repository
Sub Type: NNN

Owner Name:
Owner Company: DECInfo Locator
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: NY
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Scott Dumont
Owner Company: Realty Genesis Co LLC
Owner Address: 1280 Massachusetts Avenue

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Owner Addr2: Suite 400
Owner City,St,Zip: Manchester, MA 02138
Owner Country: United States of America
HW Code: C360211
Waste Type: lead
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: benzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1254
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: heptane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: mercury
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: naphthalene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDT
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1260
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,3,5-trimethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,2,4-TMB
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: zinc
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: chromium
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: tetrachloroethene (PCE)

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: hexane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: nickel
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: ethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: xylene (mixed)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: toluene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: carbon tetrachloride
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: 9310281
Cross Ref Type Code: 01
Cross Ref Type: Spill No.
Record Added Date: 2024-09-26 13:14:00
Record Updated: 2024-09-26 13:14:00
Updated By: MSHUBICK
Crossref ID: C360211-05-21
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2023-09-14 16:46:00
Record Updated: 2023-09-14 16:46:00
Updated By: MSHUBICK
Crossref ID: 631933465
Cross Ref Type Code: 25
Cross Ref Type: County Recording Identifier
Record Added Date: 2024-05-21 15:34:00
Record Updated: 2024-05-21 15:34:00
Updated By: MSHUBICK
Crossref ID: 05/12/2021
Cross Ref Type Code: 26
Cross Ref Type: Agreement/Consent Order Date
Record Added Date: 2023-09-14 16:45:00
Record Updated: 2023-09-14 16:45:00
Updated By: MSHUBICK
Crossref ID: 2000623
Cross Ref Type Code: 01
Cross Ref Type: Spill No.
Record Added Date: 2021-01-07 13:25:00
Record Updated: 2021-01-07 13:25:00
Updated By: MSHUBICK
Crossref ID: 9310281

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Cross Ref Type Code: 30
Cross Ref Type: SP Site ID
Record Added Date: 2021-01-07 11:07:00
Record Updated: 2021-01-07 11:07:00
Updated By: MSHUBICK

Name: 46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE
Address: 48 MCLEAN AVENUE (F/K/A 46-70 MCLEAN AVENUE)
City,State,Zip: YONKERS, NY 10705
Site Code: 615469
Control Name: Monitoring Plan
HW Code: C360211
Control Code: 31
Control Type: INST
Dt record added: 09/26/2024
Dt rec updated: 02/10/2025
Updated By: MSHUBICK
Site Code: 615469
Site Description: Site Location: The site is 0.87-acre corner lot located between two city parks, Leslie Sutherland Park to the North and Pelton Oval Park to the northeast. McLean Avenue runs along the southern border, and Van Cortlandt Park Avenue runs along the eastern border. Site Features: A vacant on-site building covers most of the site. The building interior has been demolished to allow for investigation, remediation as an Interim Remedial Measure (IRM), and stabilizing the exterior walls. The facade of the building and fencing remains around the site. The perimeter of the site is covered by a concrete and asphalt sidewalk and walkway. The building has been vacated since April 2022 by the previous tenants to allow investigation and demolition to begin. The first-floor slab and vapor barrier have been installed. A portion of the second floor is built into the hillside. The portion of the second floor built into the hillside requires a slab and a vapor barrier. Though not required by the Department, vapor extraction points were pre-emptively installed in the first floor of the partially constructed building and are proposed to be installed in the second floor upon completion of the building. Extraction points were installed instead of laterals due to the presence of shallow bedrock and perched groundwater beneath the building slab. A vapor barrier has also been installed beneath both floors of the building. Current Zoning and Land Use: The site is located in a Commercial District (CM) zoning district, which allows for commercial use. The CM is consistent with the proposed use as the CM permits use as a self-storage warehouse. Past Use of the Site: The site historically operated as an auto repair and service station from 1987 to April 2022 on the first level with various uses since the 1950 s (e.g., printing, metal manufacturing, sports manufacturer, laundry). The lower level of the site was separated into eight units in 1956. The second floor was used for heat sealing to customize jerseys, sweatshirts and performance wear. Previously, the area was predominantly inactive storage space which included collectible dolls and toys, frames, leather goods, office supplies, and antiquated printing machines. There was an inactive 5,000-gallon fuel oil underground storage tank in the southeastern portion of the site beneath a ramp. This tank was removed during the IRM conducted in October 2022 and properly closed out per local and state regulations. Documentation is provided in the IRM completion report. Site Geology and Hydrogeology: According to a 2018 Phase I and an April 2020 Phase

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

II investigation, bedrock outcrops are located to the north of the site. Geotechnical and subsurface investigations have determined the building was constructed into bedrock, which is present 1 to 5 feet (ft.) below surface grade. Surface grade is 80 to 90 ft. above mean sea level. Groundwater depth varied across the site from approximately 1 ft. below ground surface (bgs.) at the northern/central portion to approximately 16 ft. bgs in the southeast corner of the site. Groundwater generally flows towards the southwest, to the Hudson River approximately one mile away west of the site.

Env Problem: Soil and groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides, metals, cyanide, and per-and poly fluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. The primary contaminants of concern at the site are petroleum-related VOCs and SVOCs in groundwater and VOCs in soil vapor. Metals, pesticides, and polychlorinated biphenyls (PCBs) are present in site-wide soils but not in groundwater. Soil - Following the completion of the on-site IRM several constituents in soil were identified at concentrations in the top 15 feet or just above bedrock but were below the intended Restricted Residential Use SCOs except for one exceedance of lead at 572 ppm. Excavation continued until it was determined unsafe, and this area could not beremoved due to the presence of the northern first floor retaining wall and abundance of bedrock. No VOCs were detected during the RI in soil investigation. The following is a list of those compounds and the maximum exceedances remaining following the excavation IRM: Trivalent chromium detected at 94 ppm versus UUSCO of 30 ppm and below the RRSCO of 180 ppm; nickel was detected at 59.8 ppm versus RRSCO of 310 ppm; lead was detected at 572 ppm versus UUSCO of 63 ppm and the RRSCO of 400 ppm; mercury was detected at 0.75 ppm versus UUSCO 0.18 ppm and below the RRSCO of 0.81 ppm. VOCs, SVOCs, pesticides and PCBs were not detected above the UUSCOs following the IRM activities. Data does not indicate any off-site impacts in soil related to this site. Groundwater Two rounds of groundwater were taken Pre-IRM and Post-IRM. No metals, PCBs or pesticides were detected in filtered or unfiltered groundwater samples in exceedance of groundwater standards except for iron, manganese, and sodium. Iron, manganese, and sodium appear to be background levels with no distinction between upgradient and downgradient monitoring wells. These are naturally occurring or attributable to road salt. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. VOCs and SVOCs were detected above the groundwater standards as noted: benzene was detected at 7.4 ppb and 4.6 ppb exceeding the standard of 1 ppb; toluene was detected at 48 ppb and 17 ppb exceeding the standard of 5 ppb; and ethylbenzene was detected at 300 ppb exceeding the standard of 5 ppb. Total xylenes were detected at 1400 ppb exceeding the standard of 5 ppb. 1,2,4-trimethlybenezene was detected up to 270 ppb and 1,3,5-trimethlybenezene was detected up to 110 ppb exceeding standards of 5 ppb for both. For SVOCs, naphthalene was detected at 83 ppb exceeding the standard of 10 ppb. These concentrations were detected post-IRM near the tank removal. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 78.8 and 8.26 parts per trillion (ppt), respectively, exceeding the 6.7 ppt and 2.7 ppt

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

groundwater quality guidance values. 1,4-dioxane was not detected. It is unlikely off-site migration of the groundwater contamination is affecting the surrounding area. There are several closed spills across McLean Ave. Groundwater wells installed in sidewalk off-site and downgradient of the IRM tank removal did not show any exceedances for VOCs or SVOCs, or any petroleum contamination. Sub-Slab Soil Vapor and Indoor Air - Prior to the IRM, a total of nine sub-slab vapor, four indoor air, and two ambient air samples were collected on-site from within the building and outside and analyzed for VOCs and SVOCs. Primarily petroleum related contaminants were detected in the sub-slab vapor samples. PCE was detected in all nine sub-slab vapor samples collected with a maximum detection of 368 micrograms per cubic meter (ug/m3). PCE was detected in all four indoor air samples collected with a maximum detection of 1.28 ug/m3. Other VOCs detected in sub-slab vapor samples collected included carbon tetrachloride at 10 ug/m3, cyclohexane at 190,000 ug/m3, ethylbenzene at 13,000 ug/m3, n-heptane at 300,000 ug/m3, n-hexane at 280,000 ug/m3, o-xylene at 4,300 ug/m3, m & p xylene at 22,000 ug/m3, and toluene at 4,500 ug/m3. Heptane was detected in the indoor air sample collected near the petroleum tank ramp at 1,320 ug/m3. Toluene was detected at 35.4 ug/m3 in indoor air Based on the concentrations in the soil vapor intrusion samples, a post remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected. As detailed in section 6.2, based on the concentrations in the soil vapor intrusion samples, a post-remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected.

Health Problem: Since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater and/or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion sampling identified impacts in indoor air quality in the on-site building. In addition, sampling indicates soil vapor intrusion is not a concern for off-site buildings.

Dump: False
Structure: False
Lagoon: False
Landfill: False
Pond: False
Disp Start: Not reported
Disp Term: Not reported
Lat/Long: Not reported
Dell: Not reported
Record Add: 2021-04-15 13:37:00
Record Upd: 2024-09-19 11:24:00
Updated By: MSHUBICK
Own Op: Document Repository
Sub Type: NNN
Owner Name: Anne Campbell

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Owner Company: Yonkers Public Library-Riverfront Library
Owner Address: 1 Larkin Center
Owner Addr2: Not reported
Owner City,St,Zip: Yonkers, NY 10701
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SnL Yonkers, LLC
Owner Address: C/O Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Ave, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 6
Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SNL Yonkers, LLC
Owner Address: Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Avenue, 4th Floor, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Michael Colvin
Owner Company: Hampshire Co
Owner Address: 21 South Street
Owner Addr2: Not reported
Owner City,St,Zip: Morristown, NJ 07960
Owner Country: United States of America
Own Op: Document Repository
Sub Type: NNN

Owner Name:
Owner Company: DECInfo Locator
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: NY
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Scott Dumont
Owner Company: Realty Genesis Co LLC
Owner Address: 1280 Massachusetts Avenue
Owner Addr2: Suite 400
Owner City,St,Zip: Manchester, MA 02138
Owner Country: United States of America
HW Code: C360211
Waste Type: lead
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: benzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1254
Waste Quantity: UNKNOWN

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Waste Code: Not reported
HW Code: C360211
Waste Type: heptane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: mercury
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: naphthalene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDT
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1260
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,3,5-trimethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,2,4-TMB
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: zinc
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: chromium
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: tetrachloroethene (PCE)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: hexane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: nickel
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: ethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

HW Code: C360211
Waste Type: xylene (mixed)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: toluene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: carbon tetrachloride
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: 9310281
Cross Ref Type Code: 01
Cross Ref Type: Spill No.
Record Added Date: 2024-09-26 13:14:00
Record Updated: 2024-09-26 13:14:00
Updated By: MSHUBICK
Crossref ID: C360211-05-21
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2023-09-14 16:46:00
Record Updated: 2023-09-14 16:46:00
Updated By: MSHUBICK
Crossref ID: 631933465
Cross Ref Type Code: 25
Cross Ref Type: County Recording Identifier
Record Added Date: 2024-05-21 15:34:00
Record Updated: 2024-05-21 15:34:00
Updated By: MSHUBICK
Crossref ID: 05/12/2021
Cross Ref Type Code: 26
Cross Ref Type: Agreement/Consent Order Date
Record Added Date: 2023-09-14 16:45:00
Record Updated: 2023-09-14 16:45:00
Updated By: MSHUBICK
Crossref ID: 2000623
Cross Ref Type Code: 01
Cross Ref Type: Spill No.
Record Added Date: 2021-01-07 13:25:00
Record Updated: 2021-01-07 13:25:00
Updated By: MSHUBICK
Crossref ID: 9310281
Cross Ref Type Code: 30
Cross Ref Type: SP Site ID
Record Added Date: 2021-01-07 11:07:00
Record Updated: 2021-01-07 11:07:00
Updated By: MSHUBICK

Name: 46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE
Address: 48 MCLEAN AVENUE (F/K/A 46-70 MCLEAN AVENUE)
City,State,Zip: YONKERS, NY 10705
Site Code: 615469
Control Name: Soil Management Plan
HW Code: C360211
Control Code: 14
Control Type: INST

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Dt record added: 09/26/2024
Dt rec updated: 02/10/2025
Updated By: MSHUBICK
Site Code: 615469
Site Description: Site Location: The site is 0.87-acre corner lot located between two city parks, Leslie Sutherland Park to the North and Pelton Oval Park to the northeast. McLean Avenue runs along the southern border, and Van Cortlandt Park Avenue runs along the eastern border. Site Features: A vacant on-site building covers most of the site. The building interior has been demolished to allow for investigation, remediation as an Interim Remedial Measure (IRM), and stabilizing the exterior walls. The facade of the building and fencing remains around the site. The perimeter of the site is covered by a concrete and asphalt sidewalk and walkway. The building has been vacated since April 2022 by the previous tenants to allow investigation and demolition to begin. The first-floor slab and vapor barrier have been installed. A portion of the second floor is built into the hillside. The portion of the second floor built into the hillside requires a slab and a vapor barrier. Though not required by the Department, vapor extraction points were pre-emptively installed in the first floor of the partially constructed building and are proposed to be installed in the second floor upon completion of the building. Extraction points were installed instead of laterals due to the presence of shallow bedrock and perched groundwater beneath the building slab. A vapor barrier has also been installed beneath both floors of the building. Current Zoning and Land Use: The site is located in a Commercial District (CM) zoning district, which allows for commercial use. The CM is consistent with the proposed use as the CM permits use as a self-storage warehouse. Past Use of the Site: The site historically operated as an auto repair and service station from 1987 to April 2022 on the first level with various uses since the 1950 s (e.g., printing, metal manufacturing, sports manufacturer, laundry). The lower level of the site was separated into eight units in 1956. The second floor was used for heat sealing to customize jerseys, sweatshirts and performance wear. Previously, the area was predominantly inactive storage space which included collectible dolls and toys, frames, leather goods, office supplies, and antiquated printing machines. There was an inactive 5,000-gallon fuel oil underground storage tank in the southeastern portion of the site beneath a ramp. This tank was removed during the IRM conducted in October 2022 and properly closed out per local and state regulations. Documentation is provided in the IRM completion report. Site Geology and Hydrogeology: According to a 2018 Phase I and an April 2020 Phase II investigation, bedrock outcrops are located to the north of the site. Geotechnical and subsurface investigations have determined the building was constructed into bedrock, which is present 1 to 5 feet (ft.) below surface grade. Surface grade is 80 to 90 ft. above mean sea level. Groundwater depth varied across the site from approximately 1 ft. below ground surface (bgs.) at the northern/central portion to approximately 16 ft. bgs in the southeast corner of the site. Groundwater generally flows towards the southwest, to the Hudson River approximately one mile away west of the site.
Env Problem: Soil and groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides, metals, cyanide, and per-and poly fluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. The primary contaminants of concern at the site are petroleum-related

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

VOCs and SVOCs in groundwater and VOCs in soil vapor. Metals, pesticides, and polychlorinated biphenyls (PCBs) are present in site-wide soils but not in groundwater. Soil - Following the completion of the on-site IRM several constituents in soil were identified at concentrations in the top 15 feet or just above bedrock but were below the intended Restricted Residential Use SCOs except for one exceedance of lead at 572 ppm. Excavation continued until it was determined unsafe, and this area could not beremoved due to the presence of the northern first floor retaining wall and abundance of bedrock. No VOCs were detected during the RI in soil investigation. The following is a list of those compounds and the maximum exceedances remaining following the excavation IRM: Trivalent chromium detected at 94 ppm versus UUSCO of 30 ppm and below the RRSCO of 180 ppm; nickel was detected at 59.8 ppm versus RRSCO of 310 ppm; lead was detected at 572 ppm versus UUSCO of 63 ppm and the RRSCO of 400 ppm; mercury was detected at 0.75 ppm versus UUSCO 0.18 ppm and below the RRSCO of 0.81 ppm. VOCs, SVOCs, pesticides and PCBs were not detected above the UUSCOs following the IRM activities. Data does not indicate any off-site impacts in soil related to this site. Groundwater Two rounds of groundwater were taken Pre-IRM and Post-IRM. No metals, PCBs or pesticides were detected in filtered or unfiltered groundwater samples in exceedance of groundwater standards except for iron, manganese, and sodium. Iron, manganese, and sodium appear to be background levels with no distinction between upgradient and downgradient monitoring wells. These are naturally occurring or attributable to road salt. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. VOCs and SVOCs were detected above the groundwater standards as noted: benzene was detected at 7.4 ppb and 4.6 ppb exceeding the standard of 1 ppb; toluene was detected at 48 ppb and 17 ppb exceeding the standard of 5 ppb; and ethylbenzene was detected at 300 ppb exceeding the standard of 5 ppb. Total xylenes were detected at 1400 ppb exceeding the standard of 5 ppb. 1,2,4-trimethlybenezene was detected up to 270 ppb and 1,3,5-trimethlybenezene was detected up to 110 ppb exceeding standards of 5 ppb for both. For SVOCs, naphthalene was detected at 83 ppb exceeding the standard of 10 ppb. These concentrations were detected post-IRM near the tank removal. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 78.8 and 8.26 parts per trillion (ppt), respectively, exceeding the 6.7 ppt and 2.7 ppt groundwater quality guidance values. 1,4-dioxane was not detected. It is unlikely off-site migration of the groundwater contamination is affecting the surrounding area. There are several closed spills across McLean Ave. Groundwater wells installed in sidewalk off-site and downgradient of the IRM tank removal did not show any exceedances for VOCs or SVOCs, or any petroleum contamination. Sub-Slab Soil Vapor and Indoor Air - Prior to the IRM, a total of nine sub-slab vapor, four indoor air, and two ambient air samples were collected on-site from within the building and outside and analyzed for VOCs and SVOCs. Primarily petroleum related contaminants were detected in the sub-slab vapor samples. PCE was detected in all nine sub-slab vapor samples collected with a maximum detection of 368 micrograms per cubic meter (ug/m3). PCE was detected in all four indoor air samples collected with a maximum detection of 1.28 ug/m3. Other VOCs

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

detected in sub-slab vapor samples collected included carbon tetrachloride at 10 ug/m3, cyclohexane at 190,000 ug/m3, ethylbenzene at 13,000 ug/m3, n-heptane at 300,000 ug/m3, n-hexane at 280,000 ug/m3, o-xylene at 4,300 ug/m3, m & p xylene at 22,000 ug/m3, and toluene at 4,500 ug/m3. Heptane was detected in the indoor air sample collected near the petroleum tank ramp at 1,320 ug/m3. Toluene was detected at 35.4 ug/m3 in indoor air Based on the concentrations in the soil vapor intrusion samples, a post remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected. As detailed in section 6.2, based on the concentrations in the soil vapor intrusion samples, a post-remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected.

Health Problem: Since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater and/or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion sampling identified impacts in indoor air quality in the on-site building. In addition, sampling indicates soil vapor intrusion is not a concern for off-site buildings.

Dump: False
Structure: False
Lagoon: False
Landfill: False
Pond: False
Disp Start: Not reported
Disp Term: Not reported
Lat/Long: Not reported
Dell: Not reported
Record Add: 2021-04-15 13:37:00
Record Upd: 2024-09-19 11:24:00
Updated By: MSHUBICK
Own Op: Document Repository
Sub Type: NNN
Owner Name: Anne Campbell
Owner Company: Yonkers Public Library-Riverfront Library
Owner Address: 1 Larkin Center
Owner Addr2: Not reported
Owner City,St,Zip: Yonkers, NY 10701
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SnL Yonkers, LLC
Owner Address: C/O Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Ave, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 6

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SNL Yonkers, LLC
Owner Address: Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Avenue, 4th Floor, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Michael Colvin
Owner Company: Hampshire Co
Owner Address: 21 South Street
Owner Addr2: Not reported
Owner City,St,Zip: Morristown, NJ 07960
Owner Country: United States of America
Own Op: Document Repository
Sub Type: NNN

Owner Name:
Owner Company: DECInfo Locator
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: NY
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Scott Dumont
Owner Company: Realty Genesis Co LLC
Owner Address: 1280 Massachusetts Avenue
Owner Addr2: Suite 400
Owner City,St,Zip: Manchester, MA 02138
Owner Country: United States of America
HW Code: C360211
Waste Type: lead
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: benzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1254
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: heptane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: mercury
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: naphthalene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Waste Type: DDT
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1260
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,3,5-trimethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,2,4-TMB
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: zinc
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: chromium
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: tetrachloroethene (PCE)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: hexane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: nickel
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: ethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: xylene (mixed)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: toluene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: carbon tetrachloride
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: 9310281
Cross Ref Type Code: 01

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Cross Ref Type: Spill No.
Record Added Date: 2024-09-26 13:14:00
Record Updated: 2024-09-26 13:14:00
Updated By: MSHUBICK
Crossref ID: C360211-05-21
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2023-09-14 16:46:00
Record Updated: 2023-09-14 16:46:00
Updated By: MSHUBICK
Crossref ID: 631933465
Cross Ref Type Code: 25
Cross Ref Type: County Recording Identifier
Record Added Date: 2024-05-21 15:34:00
Record Updated: 2024-05-21 15:34:00
Updated By: MSHUBICK
Crossref ID: 05/12/2021
Cross Ref Type Code: 26
Cross Ref Type: Agreement/Consent Order Date
Record Added Date: 2023-09-14 16:45:00
Record Updated: 2023-09-14 16:45:00
Updated By: MSHUBICK
Crossref ID: 2000623
Cross Ref Type Code: 01
Cross Ref Type: Spill No.
Record Added Date: 2021-01-07 13:25:00
Record Updated: 2021-01-07 13:25:00
Updated By: MSHUBICK
Crossref ID: 9310281
Cross Ref Type Code: 30
Cross Ref Type: SP Site ID
Record Added Date: 2021-01-07 11:07:00
Record Updated: 2021-01-07 11:07:00
Updated By: MSHUBICK

Name: 46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE
Address: 48 MCLEAN AVENUE (F/K/A 46-70 MCLEAN AVENUE)
City,State,Zip: YONKERS, NY 10705
Site Code: 615469
Control Name: Environmental Easement
HW Code: C360211
Control Code: J
Control Type: INST
Dt record added: 09/26/2024
Dt rec updated: 02/10/2025
Updated By: MSHUBICK
Site Code: 615469
Site Description: Site Location: The site is 0.87-acre corner lot located between two city parks, Leslie Sutherland Park to the North and Pelton Oval Park to the northeast. McLean Avenue runs along the southern border, and Van Cortlandt Park Avenue runs along the eastern border. Site Features: A vacant on-site building covers most of the site. The building interior has been demolished to allow for investigation, remediation as an Interim Remedial Measure (IRM), and stabilizing the exterior walls. The facade of the building and fencing remains around the site. The perimeter of the site is covered by a concrete and asphalt sidewalk and walkway. The building has been vacated since

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

April 2022 by the previous tenants to allow investigation and demolition to begin. The first-floor slab and vapor barrier have been installed. A portion of the second floor is built into the hillside. The portion of the second floor built into the hillside requires a slab and a vapor barrier. Though not required by the Department, vapor extraction points were pre-emptively installed in the first floor of the partially constructed building and are proposed to be installed in the second floor upon completion of the building. Extraction points were installed instead of laterals due to the presence of shallow bedrock and perched groundwater beneath the building slab. A vapor barrier has also been installed beneath both floors of the building. Current Zoning and Land Use: The site is located in a Commercial District (CM) zoning district, which allows for commercial use. The CM is consistent with the proposed use as the CM permits use as a self-storage warehouse. Past Use of the Site: The site historically operated as an auto repair and service station from 1987 to April 2022 on the first level with various uses since the 1950 s (e.g., printing, metal manufacturing, sports manufacturer, laundry). The lower level of the site was separated into eight units in 1956. The second floor was used for heat sealing to customize jerseys, sweatshirts and performance wear. Previously, the area was predominantly inactive storage space which included collectible dolls and toys, frames, leather goods, office supplies, and antiquated printing machines. There was an inactive 5,000-gallon fuel oil underground storage tank in the southeastern portion of the site beneath a ramp. This tank was removed during the IRM conducted in October 2022 and properly closed out per local and state regulations. Documentation is provided in the IRM completion report. Site Geology and Hydrogeology: According to a 2018 Phase I and an April 2020 Phase II investigation, bedrock outcrops are located to the north of the site. Geotechnical and subsurface investigations have determined the building was constructed into bedrock, which is present 1 to 5 feet (ft.) below surface grade. Surface grade is 80 to 90 ft. above mean sea level. Groundwater depth varied across the site from approximately 1 ft. below ground surface (bgs.) at the northern/central portion to approximately 16 ft. bgs in the southeast corner of the site. Groundwater generally flows towards the southwest, to the Hudson River approximately one mile away west of the site.

Env Problem: Soil and groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides, metals, cyanide, and per-and poly fluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. The primary contaminants of concern at the site are petroleum-related VOCs and SVOCs in groundwater and VOCs in soil vapor. Metals, pesticides, and polychlorinated biphenyls (PCBs) are present in site-wide soils but not in groundwater. Soil - Following the completion of the on-site IRM several constituents in soil were identified at concentrations in the top 15 feet or just above bedrock but were below the intended Restricted Residential Use SCOs except for one exceedance of lead at 572 ppm. Excavation continued until it was determined unsafe, and this area could not beremoved due to the presence of the northern first floor retaining wall and abundance of bedrock. No VOCs were detected during the RI in soil investigation. The following is a list of those compounds and the maximum exceedances remaining following the excavation IRM: Trivalent chromium detected at 94 ppm versus UUSCO of 30 ppm and below the RRSCO of 180 ppm; nickel was detected at 59.8 ppm versus RRSCO of 310

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

ppm; lead was detected at 572 ppm versus UUSCO of 63 ppm and the RRSCO of 400 ppm; mercury was detected at 0.75 ppm versus UUSCO 0.18 ppm and below the RRSCO of 0.81 ppm. VOCs, SVOCs, pesticides and PCBs were not detected above the UUSCOs following the IRM activities. Data does not indicate any off-site impacts in soil related to this site. Groundwater Two rounds of groundwater were taken Pre-IRM and Post-IRM. No metals, PCBs or pesticides were detected in filtered or unfiltered groundwater samples in exceedance of groundwater standards except for iron, manganese, and sodium. Iron, manganese, and sodium appear to be background levels with no distinction between upgradient and downgradient monitoring wells. These are naturally occurring or attributable to road salt. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. VOCs and SVOCs were detected above the groundwater standards as noted: benzene was detected at 7.4 ppb and 4.6 ppb exceeding the standard of 1 ppb; toluene was detected at 48 ppb and 17 ppb exceeding the standard of 5 ppb; and ethylbenzene was detected at 300 ppb exceeding the standard of 5 ppb. Total xylenes were detected at 1400 ppb exceeding the standard of 5 ppb. 1,2,4-trimethlybenezene was detected up to 270 ppb and 1,3,5-trimethlybenezene was detected up to 110 ppb exceeding standards of 5 ppb for both. For SVOCs, naphthalene was detected at 83 ppb exceeding the standard of 10 ppb. These concentrations were detected post-IRM near the tank removal. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 78.8 and 8.26 parts per trillion (ppt), respectively, exceeding the 6.7 ppt and 2.7 ppt groundwater quality guidance values. 1,4-dioxane was not detected. It is unlikely off-site migration of the groundwater contamination is affecting the surrounding area. There are several closed spills across McLean Ave. Groundwater wells installed in sidewalk off-site and downgradient of the IRM tank removal did not show any exceedances for VOCs or SVOCs, or any petroleum contamination. Sub-Slab Soil Vapor and Indoor Air - Prior to the IRM, a total of nine sub-slab vapor, four indoor air, and two ambient air samples were collected on-site from within the building and outside and analyzed for VOCs and SVOCs. Primarily petroleum related contaminants were detected in the sub-slab vapor samples. PCE was detected in all nine sub-slab vapor samples collected with a maximum detection of 368 micrograms per cubic meter (ug/m3). PCE was detected in all four indoor air samples collected with a maximum detection of 1.28 ug/m3. Other VOCs detected in sub-slab vapor samples collected included carbon tetrachloride at 10 ug/m3, cyclohexane at 190,000 ug/m3, ethylbenzene at 13,000 ug/m3, n-heptane at 300,000 ug/m3, n-hexane at 280,000 ug/m3, o-xylene at 4,300 ug/m3, m & p xylene at 22,000 ug/m3, and toluene at 4,500 ug/m3. Heptane was detected in the indoor air sample collected near the petroleum tank ramp at 1,320 ug/m3. Toluene was detected at 35.4 ug/m3 in indoor air Based on the concentrations in the soil vapor intrusion samples, a post remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected. As detailed in section 6.2, based on the concentrations in the soil vapor intrusion samples, a post-remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected.

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Health Problem: Since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater and/or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion sampling identified impacts in indoor air quality in the on-site building. In addition, sampling indicates soil vapor intrusion is not a concern for off-site buildings.
Dump: False
Structure: False
Lagoon: False
Landfill: False
Pond: False
Disp Start: Not reported
Disp Term: Not reported
Lat/Long: Not reported
Dell: Not reported
Record Add: 2021-04-15 13:37:00
Record Upd: 2024-09-19 11:24:00
Updated By: MSHUBICK
Own Op: Document Repository
Sub Type: NNN
Owner Name: Anne Campbell
Owner Company: Yonkers Public Library-Riverfront Library
Owner Address: 1 Larkin Center
Owner Addr2: Not reported
Owner City,St,Zip: Yonkers, NY 10701
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SnL Yonkers, LLC
Owner Address: C/O Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Ave, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 6
Sub Type: P03
Owner Name: Kurt Spring
Owner Company: SNL Yonkers, LLC
Owner Address: Equity Resource Investments, LLC
Owner Addr2: 1280 Massachusetts Avenue, 4th Floor, Suite 400
Owner City,St,Zip: Cambridge, MA 02138
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Michael Colvin
Owner Company: Hampshire Co
Owner Address: 21 South Street
Owner Addr2: Not reported
Owner City,St,Zip: Morristown, NJ 07960

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Owner Country: United States of America
Own Op: Document Repository
Sub Type: NNN

Owner Name:
Owner Company: DECInfo Locator
Owner Address: Not reported
Owner Addr2: Not reported
Owner City,St,Zip: NY
Owner Country: United States of America
Own Op: 1
Sub Type: P03
Owner Name: Scott Dumont
Owner Company: Realty Genesis Co LLC
Owner Address: 1280 Massachusetts Avenue
Owner Addr2: Suite 400
Owner City,St,Zip: Manchester, MA 02138
Owner Country: United States of America
HW Code: C360211
Waste Type: lead
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: benzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1254
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: heptane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: mercury
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: naphthalene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDT
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: PCB aroclor 1260
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,3,5-trimethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: 1,2,4-TMB
Waste Quantity: UNKNOWN

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Waste Code: Not reported
HW Code: C360211
Waste Type: zinc
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: DDE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: chromium
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: tetrachloroethene (PCE)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: hexane
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: nickel
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: ethylbenzene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: xylene (mixed)
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: toluene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360211
Waste Type: carbon tetrachloride
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: 9310281
Cross Ref Type Code: 01
Cross Ref Type: Spill No.
Record Added Date: 2024-09-26 13:14:00
Record Updated: 2024-09-26 13:14:00
Updated By: MSHUBICK
Crossref ID: C360211-05-21
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2023-09-14 16:46:00
Record Updated: 2023-09-14 16:46:00
Updated By: MSHUBICK
Crossref ID: 631933465
Cross Ref Type Code: 25
Cross Ref Type: County Recording Identifier
Record Added Date: 2024-05-21 15:34:00

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

Record Updated: 2024-05-21 15:34:00
Updated By: MSHUBICK
Crossref ID: 05/12/2021
Cross Ref Type Code: 26
Cross Ref Type: Agreement/Consent Order Date
Record Added Date: 2023-09-14 16:45:00
Record Updated: 2023-09-14 16:45:00
Updated By: MSHUBICK
Crossref ID: 2000623
Cross Ref Type Code: 01
Cross Ref Type: Spill No.
Record Added Date: 2021-01-07 13:25:00
Record Updated: 2021-01-07 13:25:00
Updated By: MSHUBICK
Crossref ID: 9310281
Cross Ref Type Code: 30
Cross Ref Type: SP Site ID
Record Added Date: 2021-01-07 11:07:00
Record Updated: 2021-01-07 11:07:00
Updated By: MSHUBICK

BROWNFIELDS:

| | |
|---|---|
| Name: | 46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE |
| Address: | 48 MCLEAN AVENUE (F/K/A 46-70 MCLEAN AVENUE) |
| City,State,Zip: | YONKERS, NY 10705 |
| Program: | BCP |
| Site Code: | 615469 |
| Acres: | 0.870 |
| HW Code: | C360211 |
| SWIS: | 6018 |
| Town: | Yonkers (c) |
| Record Added Date: | 01/04/2021 |
| Record Updated Date: | 07/31/2025 |
| Update By: | KAMALONE |
| Site Description: | Site Location: The site is 0.87-acre corner lot located between two city parks, Leslie Sutherland Park to the North and Pelton Oval Park to the northeast. McLean Avenue runs along the southern border, and Van Cortlandt Park Avenue runs along the eastern border. Site Features: A vacant on-site building covers most of the site. The building interior has been demolished to allow for investigation, remediation as an Interim Remedial Measure (IRM), and stabilizing the exterior walls. The facade of the building and fencing remains around the site. The perimeter of the site is covered by a concrete and asphalt sidewalk and walkway. The building has been vacated since April 2022 by the previous tenants to allow investigation and demolition to begin. The first-floor slab and vapor barrier have been installed. A portion of the second floor is built into the hillside. The portion of the second floor built into the hillside requires a slab and a vapor barrier. Though not required by the Department, vapor extraction points were pre-emptively installed in the first floor of the partially constructed building and are proposed to be installed in the second floor upon completion of the building. Extraction points were installed instead of laterals due to the presence of shallow bedrock and perched groundwater beneath the building slab. A vapor barrier has also been installed beneath both floors of the building. Current Zoning and Land Use: The site is located in a Commercial District (CM) zoning district, which allows |

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

for commercial use. The CM is consistent with the proposed use as the CM permits use as a self-storage warehouse. Past Use of the Site: The site historically operated as an auto repair and service station from 1987 to April 2022 on the first level with various uses since the 1950 s (e.g., printing, metal manufacturing, sports manufacturer, laundry). The lower level of the site was separated into eight units in 1956. The second floor was used for heat sealing to customize jerseys, sweatshirts and performance wear. Previously, the area was predominantly inactive storage space which included collectible dolls and toys, frames, leather goods, office supplies, and antiquated printing machines. There was an inactive 5,000-gallon fuel oil underground storage tank in the southeastern portion of the site beneath a ramp. This tank was removed during the IRM conducted in October 2022 and properly closed out per local and state regulations. Documentation is provided in the IRM completion report. Site Geology and Hydrogeology: According to a 2018 Phase I and an April 2020 Phase II investigation, bedrock outcrops are located to the north of the site. Geotechnical and subsurface investigations have determined the building was constructed into bedrock, which is present 1 to 5 feet (ft.) below surface grade. Surface grade is 80 to 90 ft. above mean sea level. Groundwater depth varied across the site from approximately 1 ft. below ground surface (bgs.) at the northern/central portion to approximately 16 ft. bgs in the southeast corner of the site. Groundwater generally flows towards the southwest, to the Hudson River approximately one mile away west of the site.

Env Problem:

Soil and groundwater samples were analyzed for VOCs, SVOCs, PCBs, pesticides, metals, cyanide, and per-and poly fluoroalkyl substances (PFAS) and 1,4-dioxane. Soil vapor samples were analyzed for VOCs. The primary contaminants of concern at the site are petroleum-related VOCs and SVOCs in groundwater and VOCs in soil vapor. Metals, pesticides, and polychlorinated biphenyls (PCBs) are present in site-wide soils but not in groundwater. Soil - Following the completion of the on-site IRM several constituents in soil were identified at concentrations in the top 15 feet or just above bedrock but were below the intended Restricted Residential Use SCOs except for one exceedance of lead at 572 ppm. Excavation continued until it was determined unsafe, and this area could not beremoved due to the presence of the northern first floor retaining wall and abundance of bedrock. No VOCs were detected during the RI in soil investigation. The following is a list of those compounds and the maximum exceedances remaining following the excavation IRM: Trivalent chromium detected at 94 ppm versus UUSCO of 30 ppm and below the RRSCO of 180 ppm; nickel was detected at 59.8 ppm versus RRSCO of 310 ppm; lead was detected at 572 ppm versus UUSCO of 63 ppm and the RRSCO of 400 ppm; mercury was detected at 0.75 ppm versus UUSCO 0.18 ppm and below the RRSCO of 0.81 ppm. VOCs, SVOCs, pesticides and PCBs were not detected above the UUSCOs following the IRM activities. Data does not indicate any off-site impacts in soil related to this site. Groundwater Two rounds of groundwater were taken Pre-IRM and Post-IRM. No metals, PCBs or pesticides were detected in filtered or unfiltered groundwater samples in exceedance of groundwater standards except for iron, manganese, and sodium. Iron, manganese, and sodium appear to be background levels with no distinction between upgradient and downgradient monitoring wells. These are naturally occurring or attributable to road salt. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

surrounding areas. VOCs and SVOCs were detected above the groundwater standards as noted: benzene was detected at 7.4 ppb and 4.6 ppb exceeding the standard of 1 ppb; toluene was detected at 48 ppb and 17 ppb exceeding the standard of 5 ppb; and ethylbenzene was detected at 300 ppb exceeding the standard of 5 ppb. Total xylenes were detected at 1400 ppb exceeding the standard of 5 ppb. 1,2,4-trimethlybenezene was detected up to 270 ppb and 1,3,5-trimethlybenezene was detected up to 110 ppb exceeding standards of 5 ppb for both. For SVOCs, naphthalene was detected at 83 ppb exceeding the standard of 10 ppb. These concentrations were detected post-IRM near the tank removal. Groundwater data collected along off-site boundary to date does not show migration of contamination affecting surrounding areas. For PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) were reported at concentrations of up to 78.8 and 8.26 parts per trillion (ppt), respectively, exceeding the 6.7 ppt and 2.7 ppt groundwater quality guidance values. 1,4-dioxane was not detected. It is unlikely off-site migration of the groundwater contamination is affecting the surrounding area. There are several closed spills across McLean Ave. Groundwater wells installed in sidewalk off-site and downgradient of the IRM tank removal did not show any exceedances for VOCs or SVOCs, or any petroleum contamination. Sub-Slab Soil Vapor and Indoor Air - Prior to the IRM, a total of nine sub-slab vapor, four indoor air, and two ambient air samples were collected on-site from within the building and outside and analyzed for VOCs and SVOCs. Primarily petroleum related contaminants were detected in the sub-slab vapor samples. PCE was detected in all nine sub-slab vapor samples collected with a maximum detection of 368 micrograms per cubic meter (ug/m3). PCE was detected in all four indoor air samples collected with a maximum detection of 1.28 ug/m3. Other VOCs detected in sub-slab vapor samples collected included carbon tetrachloride at 10 ug/m3, cyclohexane at 190,000 ug/m3, ethylbenzene at 13,000 ug/m3, n-heptane at 300,000 ug/m3, n-hexane at 280,000 ug/m3, o-xylene at 4,300 ug/m3, m & p xylene at 22,000 ug/m3, and toluene at 4,500 ug/m3. Heptane was detected in the indoor air sample collected near the petroleum tank ramp at 1,320 ug/m3. Toluene was detected at 35.4 ug/m3 in indoor air Based on the concentrations in the soil vapor intrusion samples, a post remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected. As detailed in section 6.2, based on the concentrations in the soil vapor intrusion samples, a post-remediation soil vapor intrusion evaluation is required during site management. Based on the data obtained to date, no off-site soil vapor impacts are expected.

Health Problem:

Since the site is fenced and covered by asphalt or concrete, people will not come into contact with site-related soil and groundwater contamination unless they dig below the surface. Contaminated groundwater at the site is not used for drinking or other purposes and the site is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater and/or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion sampling identified impacts in indoor air quality in the on-site building. In addition, sampling indicates soil vapor

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

| | |
|---|---|
| | intrusion is not a concern for off-site buildings. |
| Dump: | False |
| Structure: | False |
| Lagoon: | False |
| Landfill: | False |
| Pond: | False |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | Not reported |
| Dell: | Not reported |
| Record Add: | 2021-04-15 13:37:00 |
| Record Upd: | 2024-09-19 11:24:00 |
| Updated By: | MSHUBICK |
| Own Op: | Document Repository |
| Sub Type: | NNN |
| Owner Name: | Anne Campbell |
| Owner Company: | Yonkers Public Library-Riverfront Library |
| Owner Address: | 1 Larkin Center |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | P03 |
| Owner Name: | Kurt Spring |
| Owner Company: | SnL Yonkers, LLC |
| Owner Address: | C/O Equity Resource Investments, LLC |
| Owner Addr2: | 1280 Massachusetts Ave, Suite 400 |
| Owner City,St,Zip: | Cambridge, MA 02138 |
| Owner Country: | United States of America |
| Own Op: | 6 |
| Sub Type: | P03 |
| Owner Name: | Kurt Spring |
| Owner Company: | SNL Yonkers, LLC |
| Owner Address: | Equity Resource Investments, LLC |
| Owner Addr2: | 1280 Massachusetts Avenue, 4th Floor, Suite 400 |
| Owner City,St,Zip: | Cambridge, MA 02138 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | P03 |
| Owner Name: | Michael Colvin |
| Owner Company: | Hampshire Co |
| Owner Address: | 21 South Street |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Morristown, NJ 07960 |
| Owner Country: | United States of America |
| Own Op: | Document Repository |
| Sub Type: | NNN |

Owner Name:

| | |
|---|---|
| Owner Company: | DECInfo Locator |
| Owner Address: | Not reported |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | NY |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | P03 |
| Owner Name: | Scott Dumont |

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

| | |
|---|---|
| Owner Company: | Realty Genesis Co LLC |
| Owner Address: | 1280 Massachusetts Avenue |
| Owner Addr2: | Suite 400 |
| Owner City,St,Zip: | Manchester, MA 02138 |
| Owner Country: | United States of America |
| HW Code: | C360211 |
| Waste Type: | lead |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | benzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | PCB aroclor 1254 |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | heptane |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | mercury |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | naphthalene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | DDT |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | PCB aroclor 1260 |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | 1,3,5-trimethylbenzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | 1,2,4-TMB |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | zinc |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | DDE |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | chromium |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

| | |
|---|---|
| HW Code: | C360211 |
| Waste Type: | tetrachloroethene (PCE) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | hexane |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | nickel |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | ethylbenzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | xylene (mixed) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | toluene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360211 |
| Waste Type: | carbon tetrachloride |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| Crossref ID: | 9310281 |
| Cross Ref Type Code: | 01 |
| Cross Ref Type: | Spill No. |
| Record Added Date: | 2024-09-26 13:14:00 |
| Record Updated: | 2024-09-26 13:14:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | C360211-05-21 |
| Cross Ref Type Code: | 23 |
| Cross Ref Type: | Agreement/Consent Order Number |
| Record Added Date: | 2023-09-14 16:46:00 |
| Record Updated: | 2023-09-14 16:46:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | 631933465 |
| Cross Ref Type Code: | 25 |
| Cross Ref Type: | County Recording Identifier |
| Record Added Date: | 2024-05-21 15:34:00 |
| Record Updated: | 2024-05-21 15:34:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | 05/12/2021 |
| Cross Ref Type Code: | 26 |
| Cross Ref Type: | Agreement/Consent Order Date |
| Record Added Date: | 2023-09-14 16:45:00 |
| Record Updated: | 2023-09-14 16:45:00 |
| Updated By: | MSHUBICK |
| Crossref ID: | 2000623 |
| Cross Ref Type Code: | 01 |
| Cross Ref Type: | Spill No. |
| Record Added Date: | 2021-01-07 13:25:00 |
| Record Updated: | 2021-01-07 13:25:00 |

**46-70 MCLEAN AVENUE AUTO REPAIR LAUNDRY SITE (Continued)** **S127478130**

| | |
|---|---|
| Updated By: | MSHUBICK |
| Crossref ID: | 9310281 |
| Cross Ref Type Code: | 30 |
| Cross Ref Type: | SP Site ID |
| Record Added Date: | 2021-01-07 11:07:00 |
| Record Updated: | 2021-01-07 11:07:00 |
| Updated By: | MSHUBICK |

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**AQ279** **MUNICIPAL HOUSING AUTHORITY** **NY LTANKS** **S106972052**
**ESE** **30 WESTERN AVE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.323 mi.**
**1707 ft.** **Site 4 of 4 in cluster AQ**

**Relative:**
**Higher**

**Actual:**
**78 ft.**

LTANKS:

| | |
|---|---|
| Name: | MUNICIPAL HOUSING AUTHORITY |
| Address: | 30 WESTERN AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0503269 / 2005-09-11 |
| Facility ID: | 0503269 |
| Site ID: | 347844 |
| Spill Date: | 2005-06-17 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Non Major Facility > 1,100 gal |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODee |
| Referred To: | WCDOH |
| Reported to Dept: | 2005-06-17 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-06-17 |
| Spill Record Last Update: | 2005-09-11 |
| Spiller Name: | JOHN BURKHARDT |
| Spiller Company: | MUNICIPALHOUSING AUTHORIT |
| Spiller Address: | 30 WESTERN AVE |
| Spiller County: | 001 |
| Spiller Contact: | JOHN BURKHARDT |
| Spiller Phone: | (914) 793-8400 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 294183 |
| Latitude: | 40.9179560 |
| Longitude: | -73.8943280 |
| DEC Memo: | September 11, 2005: TANK PASSED A RETEST AFTER PIPING WAS REPAIRED. BASED UPON INFORMATION PROVIDED TO DEC, NO FURTHER ACTION IS REQUIRED AT THIS TIME. jod |
| Remarks: | Not reported |

All TTF:

| | |
|---|---|
| Facility ID: | 0503269 |

**MUNICIPAL HOUSING AUTHORITY (Continued)** **S106972052**

| | |
|---|---|
| Spill Number: | 0503269 |
| Spill Tank Test: | 1549002 |
| Site ID: | 347844 |
| Tank Number: | 1 |
| Tank Size: | 8000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 347844 |
| Operable Unit ID: | 1105523 |
| Operable Unit: | 01 |
| Material ID: | 1521338 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**AS280** **BARTMAN RESIDENCE** **NY LTANKS** **S108639458**
**WSW** **116 BELVEDERE DRIVE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.329 mi.**
**1739 ft.** **Site 2 of 3 in cluster AS**

**Relative:**
**Higher**

**Actual:**
**55 ft.**

LTANKS:

| | |
|---|---|
| Name: | BARTMAN RESIDENCE |
| Address: | 116 BELVEDERE DRIVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0701331 / 2007-12-05 |
| Facility ID: | 0701331 |
| Site ID: | 380817 |
| Spill Date: | 2007-05-02 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2007-05-02 |
| CID: | 744 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |

**BARTMAN RESIDENCE (Continued)** **S108639458**

| | |
|---|---|
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | Not reported |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2007-05-02 |
| Spill Record Last Update: | 2007-12-05 |
| Spiller Name: | BARTMAN HOME |
| Spiller Company: | BARTMAN HOME |
| Spiller Address: | 116 BELLVADERE DRIVE |
| Spiller County: | 001 |
| Spiller Contact: | BARTMAN HOME |
| Spiller Phone: | (914) 751-3373 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 330235 |
| Latitude: | 40.9186617 |
| Longitude: | -73.9072586 |
| DEC Memo: | 12/05/07 Castlton Environmental Contractors reported that they excavated and removed one 1000 gallon tank. No holes were found in the tank and no petroleum impacted soil was observed in the excavation. NFA TG |
| Remarks: | Not reported |

All TTF:

| | |
|---|---|
| Facility ID: | 0701331 |
| Spill Number: | 0701331 |
| Spill Tank Test: | 1550809 |
| Site ID: | 380817 |
| Tank Number: | 1 |
| Tank Size: | 1000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 18 |
| Test Method 2: | Alert Model 1000 plus 1050 (Formerly Gilbarco Precision) |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 380817 |
| Operable Unit ID: | 1138290 |
| Operable Unit: | 01 |
| Material ID: | 2128273 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

**BARTMAN RESIDENCE (Continued)** **S108639458**

| | |
|---|---|
| Name: | BARTMAN RESIDENCE |
| Address: | 116 BELVEDERE DRIVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0701037 / 2007-12-05 |
| Facility ID: | 0701037 |
| Site ID: | 380485 |
| Spill Date: | 2007-04-25 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2007-04-25 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | Not reported |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2007-04-25 |
| Spill Record Last Update: | 2007-12-05 |
| Spiller Name: | RICH BARTMAN |
| Spiller Company: | Not reported |
| Spiller Address: | 116 BELVEDERE DRIVE |
| Spiller County: | 999 |
| Spiller Contact: | RICH BARTMAN |
| Spiller Phone: | (917) 756-3481 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 330235 |
| Latitude: | 40.9186617 |
| Longitude: | -73.9072586 |
| DEC Memo: | 12/05/07 Castlton Environmental Contractors reported that they excavated and removed one 1000 gallon tank. No holes were found in the tank and no petroleum impacted soil was observed in the excavation. NFA TG |
| Remarks: | Not reported |

All TTF:

| | |
|---|---|
| Facility ID: | 0701037 |
| Spill Number: | 0701037 |
| Spill Tank Test: | 1550788 |
| Site ID: | 380485 |
| Tank Number: | 1 |
| Tank Size: | 550 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |

**BARTMAN RESIDENCE (Continued)** **S108639458**

Modified By: Watchdog
Last Modified Date: Not reported

All Materials:
Site ID: 380485
Operable Unit ID: 1137967
Operable Unit: 01
Material ID: 2127929
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G
Recovered: .00
Oxygenate: Not reported

---

**AU281** **DEVA LEASING CORP.** **NY LTANKS** **S101658632**
**NE** **13 LUDLOW STREET** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.330 mi.**
**1740 ft.** **Site 1 of 6 in cluster AU**

**Relative:**
**Higher**

**Actual:**
**91 ft.**

LTANKS:
Name: DEVA LEASING CORP.
Address: 13 LUDLOW STREET
City,State,Zip: YONKERS, NY
Spill Number/Closed Date: 9505134 / 1995-07-31
Facility ID: 9505134
Site ID: 173873
Spill Date: 1995-07-27
Spill Cause: Tank Failure
Spill Source: Tank Truck
Spill Class: D4
Cleanup Ceased: 1995-07-31
SWIS: 6018
Investigator: tdghiosa
Referred To: Not reported
Reported to Dept: 1995-07-27
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: Not reported
Recommended Penalty: False
Meets Standard: True
UST Involvement: True
Remediation Phase: 0
Date Entered In Computer: 2003-12-02
Spill Record Last Update: 2003-12-02
Spiller Name: Not reported
Spiller Company: Not reported
Spiller Address: Not reported
Spiller County: 999
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Extention: Not reported

**DEVA LEASING CORP. (Continued)** **S101658632**

| | |
|---|---|
| DEC Region: | 3 |
| DER Facility ID: | 146253 |
| Latitude: | 40.9236778 |
| Longitude: | -73.8962961 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | TANK FILL BACKED UP WHILE FILLING |

All Materials:

| | |
|---|---|
| Site ID: | 173873 |
| Operable Unit ID: | 1019902 |
| Operable Unit: | 01 |
| Material ID: | 366662 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 25.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**AU282** **DEVA LEASING CORP.** **UST FINDER RELEASE** **1029060170**
**NE** **13 LUDLOW STREET** **N/A**
**1/4-1/2** **YONKERS, NY 0**
**0.330 mi.**
**1740 ft.** **Site 2 of 6 in cluster AU**

**Relative:**
**Higher**

**Actual:**
**91 ft.**

UST FINDER RELEASE:

| | |
|---|---|
| Object ID: | 258962 |
| Facility ID: | NY146253 |
| Lust ID: | NY9505134 |
| Name: | DEVA LEASING CORP. |
| Address: | 13 LUDLOW STREET |
| City,State,Zip: | YONKERS, NY 0 |
| Address Match Type: | Not reported |
| Reported Date: | 1995/07/27 15:59:59+00 |
| Status: | No Further Action |
| Substance: | Not reported |
| Population within 1500ft: | 8821 |
| Domestic Wells within 1500ft: | 4 |
| Land Use: | Developed, High Intensity |
| Within SPA: | No |
| SPA PWS Facility ID: | Not reported |
| SPA Water Type: | Not reported |
| SPA Facility Type: | Not reported |
| SPA HUC12: | Not reported |
| Within WHPA: | No |
| WHPA PWS Facility ID: | Not reported |
| WHPA Water Type: | Not reported |
| WHPA Facility Type: | Not reported |
| WHPA HUC12: | Not reported |
| Within 100yr Floodplain: | No |
| Tribe: | Not reported |
| EPA Region: | 2 |
| NFA Letter 1: | Not reported |
| NFA Letter 2: | Not reported |

**DEVA LEASING CORP. (Continued)** **1029060170**

| | |
|---|---|
| NFA Letter 3: | Not reported |
| NFA Letter 4: | Not reported |
| Closed With Residual Contaminate: | Not reported |
| Coordinate Source: | State |
| X Coord: | -73.8962999999999 |
| Y Coord: | 40.92368 |
| Latitude: | 40.9236799999999 |
| Longitude: | -73.8962999999999 |

---

**AU283** **YONKERS TREATMENT PLANT** **NY LTANKS** **S102960551**
**NE** **LUDLOW ST DOCK SOUTH** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.332 mi.**
**1752 ft.** **Site 3 of 6 in cluster AU**

**Relative:**
**Higher**

**Actual:**
**93 ft.**

LTANKS:

| | |
|---|---|
| Name: | YONKERS TREATMENT PLANT |
| Address: | LUDLOW ST DOCK SOUTH |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9711043 / 1998-01-02 |
| Facility ID: | 9711043 |
| Site ID: | 263187 |
| Spill Date: | 1998-01-02 |
| Spill Cause: | Tank Overfill |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1998-01-02 |
| CID: | 369 |
| Water Affected: | Not reported |
| Spill Notifier: | Responsible Party |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1998-01-02 |
| Spill Record Last Update: | 1998-01-26 |
| Spiller Name: | JOHN CANCOL |
| Spiller Company: | BARRIER MOTOR FUEL |
| Spiller Address: | 184 WEST MAIN ST |
| Spiller County: | 001 |
| Spiller Contact: | JOHN CANCOL |
| Spiller Phone: | (914) 631-2272 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 214552 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | miscalculation of product order led to,driver overill-pump stopped immediately crew on way to clean up product. |

All Materials:

**YONKERS TREATMENT PLANT (Continued)** **S102960551**

| | |
|---|---|
| Site ID: | 263187 |
| Operable Unit ID: | 1057425 |
| Operable Unit: | 01 |
| Material ID: | 329309 |
| Material Code: | 0008 |
| Material Name: | diesel |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 10.00 |
| Units: | G |
| Recovered: | 10.00 |
| Oxygenate: | Not reported |

---

**AS284** **BARTMAN HOME** **NY LTANKS** **S108765462**
**West** **110 SUNNYSIDE DRIVE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.332 mi.**
**1755 ft.** **Site 3 of 3 in cluster AS**

**Relative:** LTANKS:
**Lower**

| | |
|---|---|
| Name: | BARTMAN HOME |
| Address: | 110 SUNNYSIDE DRIVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0704957 / 2013-01-30 |
| Facility ID: | 0704957 |
| Site ID: | 385206 |
| Spill Date: | 2007-08-01 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2007-08-01 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2007-08-01 |
| Spill Record Last Update: | 2021-10-06 |
| Spiller Name: | CHAVA KLIENMAN- REALTY |
| Spiller Company: | BARTMAN HOME |
| Spiller Address: | 110 SUNNYSIDE DRIVE |
| Spiller County: | 001 |
| Spiller Contact: | CHAVA KLIENMAN- REALTY |
| Spiller Phone: | (917) 597-1014 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 334593 |
| Latitude: | 40.9188117 |
| Longitude: | -73.9074685 |
| DEC Memo: | To schedule the work. 8/4/10: Database review, report of a |

**Actual:**
**47 ft.**

**BARTMAN HOME (Continued)** **S108765462**

residential tank test failure. Unknown if any action was taken. No further information received. jod 1/30/2013 With Albany Approval all Homeowner TTF failures greater then 5 years old can be closed NFA JO'M
Not reported
Remarks: UNCOVER REPAIR & TEST

All TTF:
Facility ID: 0704957
Spill Number: 0704957
Spill Tank Test: 1551046
Site ID: 385206
Tank Number: 1
Tank Size: 1000
Material: 0001
EPA UST: Not reported
UST: Not reported
Cause: Not reported
Source: Not reported
Test Method: 03
Test Method 2: Horner EZ Check I or II
Leak Rate: .00
Gross Fail: Not reported
Modified By: Watchdog
Last Modified Date: Not reported

All Materials:
Site ID: 385206
Operable Unit ID: 1142481
Operable Unit: 01
Material ID: 2132718
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G
Recovered: .00
Oxygenate: Not reported

---

**AT285** **YONKERS TREAT. PLANT** **NY LTANKS** **S102663856**
**NE** **LUDLOW DOCK FACILITY** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.333 mi.**
**1757 ft.** **Site 4 of 4 in cluster AT**

**Relative:**
**Higher**

**Actual:**
**95 ft.**

LTANKS:
Name: YONKERS TREAT. PLANT
Address: LUDLOW DOCK FACILITY
City,State,Zip: YONKERS, NY
Spill Number/Closed Date: 8910956 / 1990-05-16
Facility ID: 8910956
Site ID: 295201
Spill Date: 1990-02-16
Spill Cause: Tank Overfill
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Not reported
Cleanup Ceased: 1990-05-16

**YONKERS TREAT. PLANT (Continued)** **S102663856**

| | |
|---|---|
| SWIS: | 6018 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1990-02-16 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Federal Government |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1990-02-20 |
| Spill Record Last Update: | 2001-05-14 |
| Spiller Name: | Not reported |
| Spiller Company: | SAME |
| Spiller Address: | Not reported |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 238877 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY / / : SPDES TO HANDLE. |
| Remarks: | WHILE PUMPING SEWAGE INTO TANK OPERATOR OVERFILLED TANK AND CAUSED SPILL B.SCHNEIDER (WCHD) INFORMED OF SEWAGE SPILLA.CRAWFORD DEC WP INFORMED OF SPILL |

All Materials:

| | |
|---|---|
| Site ID: | 295201 |
| Operable Unit ID: | 936473 |
| Operable Unit: | 01 |
| Material ID: | 567795 |
| Material Code: | 0066A |
| Material Name: | unknown petroleum |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 1000.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**AU286** **LUDLOW COMMONS** **NY BROWNFIELDS** **S113813697**
**NE** **7 LUDLOW STREET** **N/A**
**1/4-1/2** **YONKERS, NY 10705**
**0.337 mi.**
**1779 ft.** **Site 4 of 6 in cluster AU**

**Relative:** **Higher**
**Actual:** **92 ft.**

BROWNFIELDS:

| | |
|---|---|
| Name: | LUDLOW COMMONS |
| Address: | 7 LUDLOW STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| Program: | BCP |
| Site Code: | 338579 |

**LUDLOW COMMONS (Continued)** **S113813697**

| | |
|---|---|
| Acres: | 0.640 |
| HW Code: | C360079 |
| SWIS: | 6018 |
| Town: | Yonkers (c) |
| Record Added Date: | 03/11/2005 |
| Record Updated Date: | 05/17/2023 |
| Update By: | KATHOMPS |
| Site Description: | Location: The Ludlow Commons site is a 0.6-acre site located in an urban area at 7 Ludlow Street in the City of Yonkers. Site Features: The site is redeveloped, and an 8-story, 71-unit affordable senior housing building occupies the site. In the past, the site contained two vacant, unoccupied buildings: a 2-story building in the northeast portion of the property and a 1-story building in the north-central portion. The remainder of the property was composed of paved parking or areas of low-growing vegetation. Current Zoning/Use(s): The site is currently active with an 8-story residential building, and is in an A-zone (high density residential apartments), a restricted residential use. Neighboring uses include two to four family buildings, multi-family residential apartment buildings, residential over retail buildings, and retail stores. A church borders the western edge of the site. There is a fuel oil truck maintenance facility diagonally across the street, to the southeast. Past Use of the Site: The property was comprised of four lots, described as Block 185 Lots 48, 50, 51 and 52. In June 1990, the four lots were combined as Block 185, Lot 50. Prior use of the property, per the prior owner, was a taxi dispatch/auto repair facility until approximately 2004 when the property became vacant. Site Geology and Hydrogeology: Soils on the property consist a layer of miscellaneous fill materials overlying glacial deposits that are underlain by weathered gneiss bedrock. Depth to bedrock ranges from 5 feet to 14 feet and deeper. Groundwater flow direction is towards the southwest. Depth to groundwater ranges from 8 feet to 10 feet. |
| Env Problem: | Nature and Extent of Contamination: Remediation at the site is complete. Remedial actions have successfully achieved Track 4 clean up objectives for restricted-residential use. Residual contamination in the soil and groundwater is being managed under a Site Management Plan. Prior to remediation, the primary contaminants of concern were petroleum and its associated volatile organic compounds (VOCs) in soil and groundwater. |
| Health Problem: | Remedial actions are complete and measures are in place to control the potential for coming in contact with remaining residual contamination in soil, groundwater and soil vapor. |
| Dump: | False |
| Structure: | False |
| Lagoon: | False |
| Landfill: | False |
| Pond: | False |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | 40.92353-5 / 73.89598 |
| Dell: | False |
| Record Add: | 2005-03-11 13:04:00 |
| Record Upd: | 2017-12-22 12:07:00 |
| Updated By: | WXWU |
| Own Op: | Document Repository |
| Sub Type: | NNN |
| Owner Name: | Sandy Amoyaw |

**LUDLOW COMMONS (Continued)** **S113813697**

| | |
|---|---|
| Owner Company: | Yonkers Public Library - Riverfront Branch |
| Owner Address: | One Larkin Center |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | P03 |
| Owner Name: | Richard Nightingale |
| Owner Company: | Ludlow Commons Housing Development Fund Corporation |
| Owner Address: | 8 Bashford St |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | 6 |
| Sub Type: | P03 |
| Owner Name: | samantha chiafalo |
| Owner Company: | Westhab, Inc. |
| Owner Address: | 8 Bashford Street |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | P03 |
| Owner Name: | Richard Nightingale |
| Owner Company: | Ludlow Commons Limited Partnership |
| Owner Address: | 8 Bashford St |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | 6 |
| Sub Type: | P03 |
| Owner Name: | Richard Nightingale |
| Owner Company: | Ludlow Commons Housing Development Fund Corporation |
| Owner Address: | 8 Bashford St |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | Document Repository |
| Sub Type: | B99 |
| Owner Name: | Please call for an appointment |
| Owner Company: | NYSDEC, Region 3 |
| Owner Address: | 21 S. Putt Corners Road |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | New Paltz, NY 12561 |
| Owner Country: | United States of America |
| Own Op: | 6 |
| Sub Type: | P03 |
| Owner Name: | Richard Nightingale |
| Owner Company: | Ludlow Commons Limited Partnership |
| Owner Address: | 8 Bashford St |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| HW Code: | C360079 |
| Waste Type: | xylene (mixed) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |

**LUDLOW COMMONS (Continued)** **S113813697**

| | |
|---|---|
| HW Code: | C360079 |
| Waste Type: | isopropylbenzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360079 |
| Waste Type: | lead |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360079 |
| Waste Type: | benzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360079 |
| Waste Type: | 1,2,4-trimethylbenzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360079 |
| Waste Type: | tetrachloroethene (PCE) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360079 |
| Waste Type: | n-propylbenzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360079 |
| Waste Type: | o-xylene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360079 |
| Waste Type: | toluene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360079 |
| Waste Type: | ethylbenzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360079 |
| Waste Type: | methyl-tert-butyl ether (MTBE) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360079 |
| Waste Type: | Petroleum Products |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| Crossref ID: | 1010142 |
| Cross Ref Type Code: | 01 |
| Cross Ref Type: | Spill No. |
| Record Added Date: | 2015-03-11 10:29:00 |
| Record Updated: | 2015-03-11 10:29:00 |
| Updated By: | WXWU |
| Crossref ID: | C360079-07-13 |
| Cross Ref Type Code: | 23 |
| Cross Ref Type: | Agreement/Consent Order Number |
| Record Added Date: | 2017-12-01 16:49:00 |
| Record Updated: | 2017-12-01 16:49:00 |
| Updated By: | WXWU |
| Crossref ID: | 572013129 |

**LUDLOW COMMONS (Continued)** **S113813697**

| | |
|---|---|
| Cross Ref Type Code: | 25 |
| Cross Ref Type: | County Recording Identifier |
| Record Added Date: | 2017-12-01 16:54:00 |
| Record Updated: | 2017-12-01 16:54:00 |
| Updated By: | WXWU |

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**AU287** **BUSINESS** **UST FINDER RELEASE** **1029072821**
**NE** **7-17 LUDLOW STREET** **N/A**
**1/4-1/2** **YONKERS, NY 0**
**0.337 mi.**
**1779 ft.** **Site 5 of 6 in cluster AU**

**Relative:**
**Higher**

**Actual:**
**92 ft.**

UST FINDER RELEASE:

| | |
|---|---|
| Object ID: | 258973 |
| Facility ID: | NY301530 |
| Lust ID: | NY508586 |
| Name: | BUSINESS |
| Address: | 7-17 LUDLOW STREET |
| City,State,Zip: | YONKERS, NY 0 |
| Address Match Type: | Not reported |
| Reported Date: | 2005/10/18 15:59:59+00 |
| Status: | No Further Action |
| Substance: | Not reported |
| Population within 1500ft: | 8525 |
| Domestic Wells within 1500ft: | 4 |
| Land Use: | Developed, High Intensity |
| Within SPA: | No |
| SPA PWS Facility ID: | Not reported |
| SPA Water Type: | Not reported |
| SPA Facility Type: | Not reported |
| SPA HUC12: | Not reported |
| Within WHPA: | No |
| WHPA PWS Facility ID: | Not reported |
| WHPA Water Type: | Not reported |
| WHPA Facility Type: | Not reported |
| WHPA HUC12: | Not reported |
| Within 100yr Floodplain: | No |
| Tribe: | Not reported |
| EPA Region: | 2 |
| NFA Letter 1: | Not reported |
| NFA Letter 2: | Not reported |
| NFA Letter 3: | Not reported |
| NFA Letter 4: | Not reported |
| Closed With Residual Contaminate: | Not reported |
| Coordinate Source: | State |
| X Coord: | -73.896 |
| Y Coord: | 40.92366 |
| Latitude: | 40.9236599999999 |
| Longitude: | -73.896 |

**AU288** **17 LUDLOW STREET PROJECT** **NY LTANKS** **S107416993**
**NE** **7-17 LUDLOW STREET** **NY Spills** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.337 mi.**
**1779 ft.** **Site 6 of 6 in cluster AU**

**Relative:** **Higher**

**Actual:** **92 ft.**

LTANKS:

| | |
|---|---|
| Name: | BUSINESS |
| Address: | 7-17 LUDLOW STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0508586 / 2007-03-05 |
| Facility ID: | 0508586 |
| Site ID: | 354197 |
| Spill Date: | 2005-10-18 |
| Spill Cause: | Tank Failure |
| Spill Source: | Non Major Facility > 1,100 gal |
| Spill Class: | B3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | WCDOH |
| Reported to Dept: | 2005-10-18 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | 2005-10-18 |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | True |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-10-18 |
| Spill Record Last Update: | 2010-12-27 |
| Spiller Name: | Not reported |
| Spiller Company: | BUSINESS |
| Spiller Address: | 7-17 LUDLOW STREET |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | (914) 328-6549 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 301530 |
| Latitude: | 40.9236579 |
| Longitude: | -73.8959990 |
| DEC Memo: | No one available for update. letter dated 1/12/2006 from Karen Magnuson, WDOH, to Louis Buoninfante 17 October 2006: Further ground water investigation required. WCDOH >>>>>>>>>>>> January 17, 2007 Louis Buoninfante Joe Buoninfante 7-17Ludlow Street Corp 2712 East Tremont Avenue Bronx, NY 10461 Re: PBS 3-801293, Spill # 0508586 7-17 Ludlow Street, Yonkers, NY To Whom It May Concern: This Department had reviewed the groundwater sample analysis report regarding the September 26 and October 31, 2006 sampling events at the above location submitted by Royal Environmental on January 17, 2007. Comparison of VOC and SVOC levels to TAGM guidelines indicates that no further sampling or remediation is necessary at this time. A request has been made to the NYSDEC to close the above spill #. Sincerely, Wayne Schneider Sanitarian Office of Environmental Health Risk Control 12/27/10: See Spill 10-10142. jod |
| Remarks: | REMOVING TNKS AND FOUND HOLES AND CONTAMINATED SOIL: |

**17 LUDLOW STREET PROJECT (Continued)** **S107416993**

All Materials:

| | |
|---|---|
| Site ID: | 354197 |
| Operable Unit ID: | 1111627 |
| Operable Unit: | 01 |
| Material ID: | 2101663 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | 17 LUDLOW STREET PROJECT |
| Address: | 7-17 LUDLOW STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0412184 / 2007-05-04 |
| Facility ID: | 0412184 |
| Facility Type: | ER |
| DER Facility ID: | 301530 |
| Site ID: | 337569 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2005-02-15 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2005-02-15 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-02-15 |
| Spill Record Last Update: | 2007-05-04 |
| Spiller Name: | PETER SUTHERLAND |
| Spiller Company: | 17 LUDLOW STREET PROJECT |
| Spiller Address: | 7-17 LEDLOW STREET |
| Spiller Company: | 001 |
| Contact Name: | PETER SUTHERLAND |
| Latitude: | 40.9236579 |
| Longitude: | -73.8959990 |
| DEC Memo: | ALSO REPORTED AS SPILL 05-08586. NFA jod |
| Remarks: | SOIL BORINGS SHOWED CONTAMINATION: GAS DISPENSER IS ON SITE AND MAY BE A UST IN CLOSE CONTACT: |
| Name: | VACANT COMMERCIAL |

**17 LUDLOW STREET PROJECT (Continued)** **S107416993**

| | |
|---|---|
| Address: | 7-17 LUDLOW STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1010142 / 2018-03-23 |
| Facility ID: | 1010142 |
| Facility Type: | ER |
| DER Facility ID: | 301530 |
| Site ID: | 443733 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2010-12-27 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2010-12-27 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2010-12-27 |
| Spill Record Last Update: | 2018-03-23 |
| Spiller Name: | RICHARD HOOKER |
| Spiller Company: | UNKNOWN |
| Spiller Address: | 7-17 LUDLOW ST |
| Spiller Company: | 999 |
| Contact Name: | RICHARD HOOKER |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 12/27/10: I spoke with the caller, Richard Hooker of Eco-Systems. He states the free product found in a monitoring well was stale gasoline , and it was actually observed several months ago. He states he did not report a spill at that time because he was under the impression there was an existing open spill number assigned to the property. He discovered today the existing spill numbers are closed. Database indicates the former owner of the property was Louis Buoninfante. Spill 0142184 was reported Feb of 2005 when contamination was found in a soil boring near a gasoline dispenser. That spill was closed and referred to Spill 0508586. Spill 0508586 was reported Oct of 2005 when Royal Environmental was removing a gasoline tanks. (Mr Hooker states the information he has indicates a 4K tank was removed but there were possibly additional tanks on site) The site was PBS registered with WCDOH as 3-801293 at the time. Ground water contamination was evident and monitoring wells were installed as part of that remediation. Reports were being submitted to The Health Dept and the spill was closed in Jan of 2007. Eco-Systems was |

**17 LUDLOW STREET PROJECT (Continued)** **S107416993**

initially hired by West-Hab to
conduct a Phase I site assessment. Mr Hooker states the Phase I recommended further investigation
to determine if there was still contamination and/or USTs on the property. West-Hab reportedly
purchased the property, and then hired Eco-Systems for a Phase II. It was during this investigation
(at the end of the summer ) that the free product was observed. Mr Hooker states he located four
monitoring wells on the vacant property and the central well had the free product. Eco-Systems is
submitting a proposal to West-Hab for further investigation and remediation. jod 12/27/10: I spoke
with Richard Hooker at Eco-Systems. He will forward report to Todd Ghiosay in White Plains. jod
03/23/18 Cleanup completed under the Brownfields Cleanup Program C360079. NFA by spills. TG

Remarks: Caller reporting product in a monitoring well.

All Materials:

| | |
|---|---|
| Site ID: | 443733 |
| Operable Unit ID: | 1194183 |
| Operable Unit: | 01 |
| Material ID: | 2189905 |
| Material Code: | 0066A |
| Material Name: | unknown petroleum |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**AV289** **ICON CONTRACTING GROUP INC.** **NY LTANKS** **1001405118**
**ESE** **36 RADFORD STREET** **NY Spills** **NYR000065656**
**1/4-1/2** **YONKERS, NY 10705** **RCRA NonGen / NLR**
**0.343 mi.** **FINDS**
**1811 ft.** **Site 1 of 2 in cluster AV** **ECHO**
**E MANIFEST**
**Relative: Higher** **NY MANIFEST**

**Actual: 82 ft.**

LTANKS:

| | |
|---|---|
| Name: | CITY YONKERS FIRE ENG. #4 |
| Address: | 36 RADFORD STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0707661 / 2009-10-07 |
| Facility ID: | 0707661 |
| Site ID: | 388397 |
| Spill Date: | 2007-10-11 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jkomara |
| Referred To: | WCDOH |
| Reported to Dept: | 2007-10-11 |

**ICON CONTRACTING GROUP INC. (Continued)** **1001405118**

| | |
|---|---|
| CID: | 406 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | Not reported |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2007-10-11 |
| Spill Record Last Update: | 2009-10-07 |
| Spiller Name: | ALBINA GLAZ |
| Spiller Company: | CITY YONKERS FIRE ENG. #4 |
| Spiller Address: | 36 RADFORD ST. |
| Spiller County: | 001 |
| Spiller Contact: | ALBINA GLAZ |
| Spiller Phone: | (917) 377-6735 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 139199 |
| Latitude: | 40.9169017 |
| Longitude: | -73.8943586 |
| DEC Memo: | This was a failed retest, original failure reported as 07-01094. Tank to be removed. |
| Remarks: | Tank test failure. Will remove tank and clean up any contamination. |

All TTF:

| | |
|---|---|
| Facility ID: | 0707661 |
| Spill Number: | 0707661 |
| Spill Tank Test: | 1815617 |
| Site ID: | 388397 |
| Tank Number: | Not reported |
| Tank Size: | 2000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 388397 |
| Operable Unit ID: | 1145571 |
| Operable Unit: | 01 |
| Material ID: | 2135906 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

**ICON CONTRACTING GROUP INC. (Continued)** **1001405118**

| | |
|---|---|
| Name: | FIRE DEPT |
| Address: | 36 RADFORD STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0701094 / 2008-09-08 |
| Facility ID: | 0701094 |
| Site ID: | 380586 |
| Spill Date: | 2007-04-26 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | B4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | WCDOH |
| Reported to Dept: | 2007-04-26 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | Not reported |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2007-04-27 |
| Spill Record Last Update: | 2008-09-08 |
| Spiller Name: | DEBBIE |
| Spiller Company: | FIRE DEPT |
| Spiller Address: | 36 RADFORD STREET |
| Spiller County: | 001 |
| Spiller Contact: | DEBBIE |
| Spiller Phone: | (914) 377-6733 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 139199 |
| Latitude: | 40.9169017 |
| Longitude: | -73.8943586 |
| DEC Memo: | Tank failed retest. See spill 07-07661. NFA this duplicate number. jod |
| | Not reported |
| Remarks: | DOUBLE WALL AND OUTER WALL FAILED |

All TTF:

| | |
|---|---|
| Facility ID: | 0701094 |
| Spill Number: | 0701094 |
| Spill Tank Test: | 1550794 |
| Site ID: | 380586 |
| Tank Number: | 1 |
| Tank Size: | 1000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

**ICON CONTRACTING GROUP INC. (Continued)** **1001405118**

All Materials:

| | |
|---|---|
| Site ID: | 380586 |
| Operable Unit ID: | 1138064 |
| Operable Unit: | 01 |
| Material ID: | 2128035 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | FIRE HOUSE |
| Address: | 36 RADFORD STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0204086 / 2002-07-19 |
| Facility ID: | 0204086 |
| Facility Type: | ER |
| DER Facility ID: | 139199 |
| Site ID: | 165127 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 2002-07-19 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2002-07-19 |
| CID: | 365 |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2002-07-19 |
| Spill Record Last Update: | 2002-07-22 |
| Spiller Name: | CAPT STEVINS |
| Spiller Company: | FIRE HOUSE |
| Spiller Address: | 36 RADFORD ST |
| Spiller Company: | 001 |
| Contact Name: | CAPT STEVINS |
| Latitude: | 40.9170760 |
| Longitude: | -73.8945297 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'DEE 07/19/02 CLEANUP COMPLETED BY METRO FUEL AND YONKERS FD. NFA AT THIS TIME. |
| Remarks: | inch chart at the fire house was not correct - they had it at 64 inches & its really 48 inches - clean up progress & contained |

**ICON CONTRACTING GROUP INC. (Continued)** **1001405118**

All Materials:

| | |
|---|---|
| Site ID: | 165127 |
| Operable Unit ID: | 855302 |
| Operable Unit: | 01 |
| Material ID: | 518345 |
| Material Code: | 0008 |
| Material Name: | diesel |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 20.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

RCRA Listings:

| | |
|---|---|
| Date Form Received by Agency: | 20110720 |
| Handler Name: | Yonkers City Of Fire Station 4 |
| Handler Address: | Radford St |
| Handler City,State,Zip: | YONKERS, NY 10705 |
| EPA ID: | NYR000065656 |
| Contact Name: | KENNETH GREEHAN |
| Contact Address: | SAW MILL RIVER RD |
| Contact City,State,Zip: | YONKERS, NY 10703 |
| Contact Telephone: | 914-377-6751 |
| Contact Fax: | Not reported |
| Contact Email: | Not reported |
| Contact Title: | MGR |
| EPA Region: | 02 |
| Land Type: | Municipal |
| Federal Waste Generator Description: | Not a generator, verified |
| Non-Notifier: | Not reported |
| Biennial Report Cycle: | Not reported |
| Accessibility: | Not reported |
| Active Site Indicator: | Not reported |
| State District Owner: | Ny |
| State District: | NYSDEC R3 |
| Mailing Address: | SAW MILL RIVER RD |
| Mailing City,State,Zip: | YONKERS, NY 10703 |
| Owner Name: | Not reported |
| Owner Type: | Not reported |
| Operator Name: | Not reported |
| Operator Type: | Not reported |
| Short-Term Generator Activity: | No |
| Importer Activity: | No |
| Mixed Waste Generator: | No |
| Transporter Activity: | No |
| Transfer Facility Activity: | No |
| Recycler Activity with Storage: | No |
| Small Quantity On-Site Burner Exemption: | No |
| Smelting Melting and Refining Furnace Exemption: | No |
| Underground Injection Control: | No |
| Off-Site Waste Receipt: | No |
| Universal Waste Indicator: | No |
| Universal Waste Destination Facility: | No |
| Federal Universal Waste: | No |

**ICON CONTRACTING GROUP INC. (Continued)** **1001405118**

| | |
|---|---|
| Active Site State-Reg Handler: | --- |
| Federal Facility Indicator: | Not reported |
| Hazardous Secondary Material Indicator: | N |
| Sub-Part K Indicator: | Not reported |
| 2018 GPRA Permit Baseline: | Not on the Baseline |
| 2018 GPRA Renewals Baseline: | Not on the Baseline |
| 202 GPRA Corrective Action Baseline: | No |
| Subject to Corrective Action Universe: | No |
| Non-TSDFs Where RCRA CA has Been Imposed Universe: | No |
| Corrective Action Priority Ranking: | No NCAPS ranking |
| Environmental Control Indicator: | No |
| Institutional Control Indicator: | No |
| Human Exposure Controls Indicator: | N/A |
| Groundwater Controls Indicator: | N/A |
| Significant Non-Complier Universe: | No |
| Unaddressed Significant Non-Complier Universe: | No |
| Addressed Significant Non-Complier Universe: | No |
| Significant Non-Complier With a Compliance Schedule Universe: | No |
| Financial Assurance Required: | Not reported |
| Handler Date of Last Change: | 20150414 |
| Recognized Trader-Importer: | No |
| Recognized Trader-Exporter: | No |
| Importer of Spent Lead Acid Batteries: | No |
| Exporter of Spent Lead Acid Batteries: | No |
| Recycler Activity Without Storage: | No |
| Manifest Broker: | No |
| Sub-Part P Indicator: | No |

Hazardous Waste Summary:

| | |
|---|---|
| Waste Code: | D000 |
| Waste Description: | Not Defined |
| Waste Code: | D008 |
| Waste Description: | Lead |
| Waste Code: | D009 |
| Waste Description: | Mercury |

Handler - Owner Operator:

| | |
|---|---|
| Owner/Operator Indicator: | Owner |
| Owner/Operator Name: CITY OF YONKERS | |
| Legal Status: | Municipal |
| Date Became Current: | Not reported |
| Date Ended Current: | Not reported |
| Owner/Operator Address: | 40 S BROADWAY |
| Owner/Operator City,State,Zip: | YONKERS, NY 10701 |
| Owner/Operator Telephone: | 914-377-6208 |
| Owner/Operator Telephone Ext: | Not reported |
| Owner/Operator Fax: | Not reported |
| Owner/Operator Email: | Not reported |
| Owner/Operator Indicator: | Operator |
| Owner/Operator Name: CITY OF YONKERS | |
| Legal Status: | Municipal |
| Date Became Current: | Not reported |

**ICON CONTRACTING GROUP INC. (Continued)** **1001405118**

Date Ended Current: Not reported
Owner/Operator Address: 40 S BROADWAY
Owner/Operator City,State,Zip: YONKERS, NY 10701
Owner/Operator Telephone: 914-377-6208
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: PO
Owner/Operator Name: CITY OF YONKERS
Legal Status: Municipal
Date Became Current: 19990111
Date Ended Current: 20110720
Owner/Operator Address: 735 SAW MILL RIVER RD
Owner/Operator City,State,Zip: YONKERS, NY 10703
Owner/Operator Telephone: 914-377-6751
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: PP
Owner/Operator Name: CITY OF YONKERS
Legal Status: Municipal
Date Became Current: 19990111
Date Ended Current: 20110720
Owner/Operator Address: 735 SAW MILL RIVER RD
Owner/Operator City,State,Zip: YONKERS, NY 10703
Owner/Operator Telephone: 914-377-6751
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: CITY OF YONKERS
Legal Status: Municipal
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 40 S BROADWAY
Owner/Operator City,State,Zip: YONKERS, NY 10701
Owner/Operator Telephone: 914-377-6208
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20060101
Handler Name: YONKERS CITY OF FIRE STATION 4
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

**ICON CONTRACTING GROUP INC. (Continued)** **1001405118**

Receive Date: 20070101
Handler Name: YONKERS CITY OF FIRE STATION 4
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20110720
Handler Name: YONKERS CITY OF FIRE STATION 4
Federal Waste Generator Description: Not a generator, verified
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19990111
Handler Name: YONKERS CITY OF FIRE STATION 4
Federal Waste Generator Description: Small Quantity Generator
State District Owner: Ny
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110004550218

Click Here for FRS Facility Detail Report:

Environmental Interest/Information System:
The Resource Conservation and Recovery Act Information System

**ICON CONTRACTING GROUP INC. (Continued)** **1001405118**

(RCRAInfo) is EPA's comprehensive information system in support of the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. It tracks many types of information about generators, transporters, treaters, storers, and disposers of hazardous waste.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

| | |
|---|---|
| Envid: | 1001405118 |
| Registry ID: | 110004550218 |

DFR URL:

| | |
|---|---|
| Name: | YONKERS CITY OF FIRE STATION 4 |
| Address: | 36 Radford St |
| City,State,Zip: | YONKERS, NY 10705 |

E MANIFEST:

| | |
|---|---|
| Manifest Tracking Number: | 023852957JJK |
| Last Updated Date: | 20220630 |
| Shipped Date: | 20220308 |
| Received Date: | 20220620 |
| Manifest Status: | Signed |
| Submission Type: | DataImage5Copy |
| Origin Type: | Service |
| Generator EPA ID: | VSQG |
| Generator Name: | Icon Contracting Group Inc. |
| Generator Location Street Number: | Not reported |
| Generator Location Street 1: | 36 RADFORD STREET |
| Generator Location Street 2: | Not reported |
| Generator Location City: | YONKERS |
| Generator Location State: | NY |
| Generator Location Zip: | 10705 |
| Generator Mail Street Number: | Not reported |
| Generator Mail Street 1: | 36 RADFORD STREET |
| Generator Mail Street 2: | Not reported |
| Generator Mail City: | YONKERS |
| Generator Mail Zip: | 10705 |
| Generator Mail State: | NY |
| Generator Contact Company Name: | Not reported |
| Designated Facility EPA ID: | NJD002200046 |
| Designated Facility Name: | Cycle Chem, Inc. |
| Designated Facility Mail Street Number: | Not reported |
| Designated Facility Mail Street 1: | Not reported |
| Designated Facility Mail Street 2: | 217 SOUTH FIRST STREET |
| Designated Facility Mail City: | ELIZABETH |
| Designated Facility Mail Zip: | 07206 |
| Designated Facility Mail State: | NJ |
| Designated Facility Location Street Number: | Not reported |
| Designated Facility Location Street 1: | 217 SOUTH FIRST STREET |
| Designated Facility Location Street 2: | Not reported |
| Designated Facility Location City: | ELIZABETH |
| Designated Facility Location Zip: | 07206 |
| Designated Facility Location State: | NJ |
| Designated Facility Contact Company Name: | Not reported |
| Manifest Residue Indicator: | N |

**ICON CONTRACTING GROUP INC. (Continued)** **1001405118**

Rejection Indicator: N

Transporter:
Manifest Tracking Number: 023852957JJK
Transporter Line Number: 1
Transporter EPA ID: NYD986938645
Transporter Name: Tri-State Transfer Associates Inc

Manifest Tracking Number: 023852957JJK
Transporter Line Number: 2
Transporter EPA ID: NJD003812047
Transporter Name: Acv Environmental Services, Inc

Waste Line:
Manifest Tracking Number: 023852957JJK
Waste Line Number: 1
U.S. DOT Hazardous Indicator: Y
U.S. DOT ID Number: NA3077
U.S. DOT Description: Na3077, Hazardous Waste, Solid, N.O.S. (Lead), 9 , Iii
Non-Hazardous Waste Description: Not reported
Number of Containers: 6
Container Type Code: DM
Container Type Description: Metal drums, barrels, kegs
Waste Quantity: 100
Quantity Unit of Measure Code: G
Quantity Unit of Measure Description: Gallons
Waste Quantity, in Tons: 0.41701418
Acute Waste Quantity, in Tons: 0
Non-Acute Waste Quantity, in Tons: 0.41701418
Waste Quantity, in Kilograms: 378.2444
Acute Waste Quantity, in Kilograms: 0
Non-Acute Waste Quantity, in Kilorgrams: 378.2444
Management Method Code: H110
Management Method Description: STABILIZATION
Waste Residue Indicator: N
Quantity Discrepancy Indicator: N
Waste Type Discrepancy Indicator: N
Waste Density: Not reported
Waste Density Unit of Measure Code: Not reported
Waste Density Unit of Measure Description: Not reported
Form Code: Not reported
Form Code Description: Not reported
Source Code: Not reported
Source Code Description: Not reported
Waste Minimization Code: Not reported
Waste Minimization Code Description: Not reported
Consent Number: Not reported
EPA Waste Indicator: Y
Federal Waste Codes: D008
Quantity Haz Kg: 378.2444
Quantity Haz Tons: 0.41701418
Quantity Non Haz Kg: 0
Quantity Non Haz Tons: 0
State Waste Codes: NY-T

**ICON CONTRACTING GROUP INC. (Continued)** **1001405118**

NY MANIFEST:

| | |
|---|---|
| EPA ID: | NYR000065656 |
| Country: | USA |
| Name: | Yonkers Fire House 4 |
| Address: | 36 RADFORD ST |
| Address 2: | Not reported |
| City,State,Zip: | YONKERS, NY 10705 |
| Zip 4: | Not reported |
| Location Address 1: | 36 RADFORD ST |
| Location Address 2: | Not reported |
| Location City,State,Zip: | YONKERS, NY 10705 |
| Location Zip 4: | Not reported |
| Facility Status: | Not reported |
| Total Tanks: | Not reported |
| Code: | BP |

Mailing:

| | |
|---|---|
| Mailing Name: | Yonkers Fire House 4 |
| Mailing Contact: | Pierre Marcil |
| Mailing Address 1: | 36 RADFORD ST |
| Mailing Address 2: | Not reported |
| Mailing City,State,Zip: | YONKERS, NY 10705 |
| Mailing Zip 4: | Not reported |
| Mailing Country: | USA |
| Mailing Phone: | 6022332955 |

Manifest Data:

| | |
|---|---|
| Document ID: | NYB7359021 |
| Manifest Status: | Not reported |
| Trans1 State ID: | AZ002 |
| Year: | 2000 |
| Trans2 State ID: | Not reported |
| Generator Ship Date: | 08/08/2000 |
| Trans1 Recv Date: | 08/08/2000 |
| Trans2 Recv Date: | Not reported |
| TSD Site Recv Date: | 08/16/2000 |
| Part A Recv Date: | Not reported |
| Part B Recv Date: | Not reported |
| Generator EPA ID: | NYR000065656 |
| Trans1 EPA ID: | WID988566543 |
| Trans2 EPA ID: | Not reported |
| TSDF ID 1: | AZ0000337360 |
| TSDF ID 2: | Not reported |
| Manifest Tracking Number: | Not reported |
| Import Indicator: | Not reported |
| Export Indicator: | Not reported |
| Discr Quantity Indicator: | Not reported |
| Discr Type Indicator: | Not reported |
| Discr Residue Indicator: | Not reported |
| Discr Partial Reject Indicator: | Not reported |
| Discr Full Reject Indicator: | Not reported |
| Manifest Ref Number: | Not reported |
| Alt Facility RCRA ID: | Not reported |
| Alt Facility Sign Date: | Not reported |
| MGMT Method Type Code: | Not reported |
| Waste Code 1: | Mercury |
| Waste Code 2: | Not reported |

**ICON CONTRACTING GROUP INC. (Continued)** **1001405118**

| | |
|---|---|
| Waste Code 3: | Not reported |
| Waste Code 4: | Not reported |
| Waste Code 5: | Not reported |
| Waste Code 6: | Not reported |
| Quantity: | 00200 |
| Units: | Pounds |
| Number of Containers: | 002 |
| Container Type: | Fiberboard or plastic drums, barrels, kegs |
| Handling Method: | Recycle |
| Specific Gravity: | 01.00 |
| Waste Code 7: | Mercury |
| Waste Code 8: | Not reported |
| Waste Code: | Not reported |
| Waste Code 10: | Not reported |
| Waste Code 11: | Not reported |
| Quantity: | 00020 |
| Units: | Pounds |
| Number of Containers: | 001 |
| Container Type: | Fiber or plastic boxes, cartons, cases |
| Handling Method: | Recycle |
| Specific Gravity: | 01.00 |

---

**AR290** **RESIDENCE** **NY LTANKS** **S102232709**
**SE** **58 BRUCE ST** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.346 mi.**
**1826 ft.** **Site 2 of 2 in cluster AR**

**Relative:** **Higher**
**Actual:** **97 ft.**

LTANKS:

| | |
|---|---|
| Name: | RESIDENCE |
| Address: | 58 BRUCE ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9507976 / 2012-04-16 |
| Facility ID: | 9507976 |
| Site ID: | 220471 |
| Spill Date: | 1995-09-28 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | UNASSIGNED |
| Referred To: | Not reported |
| Reported to Dept: | 1995-09-28 |
| CID: | 351 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1995-09-28 |
| Spill Record Last Update: | 2012-04-16 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |

**RESIDENCE (Continued)** **S102232709**

| | |
|---|---|
| Spiller County: | 999 |
| Spiller Contact: | STEVE EDLUND |
| Spiller Phone: | (914) 423-6265 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 182355 |
| Latitude: | 40.9157380 |
| Longitude: | -73.8955980 |
| DEC Memo: | 01/02/96 TRIED TO CONFIRM TANK REMOVAL NO CONTACT TWO LETTERS SENT OUT ONE WITH RETURN RECIEPT BOTH RETURNED UNDELIVERED 8/2/10 Homeowner TTF JO'M 4/16/12 This spill has been closed administratively based on the following: 1) The spill is at least 10 years old 2) It is a Homeowner (non regulated tank) Tank Test Failure 3) There is no indication of an Environmental impact This Closure does not remove the possibility of DEC requiring further work in the future. NFA JO'M |
| Remarks: | TANK IS VAULTED IN BASEMENT - OWNER IS GOING TO TRY TO REPAIR |

All TTF:

| | |
|---|---|
| Facility ID: | 9507976 |
| Spill Number: | 9507976 |
| Spill Tank Test: | 1544179 |
| Site ID: | 220471 |
| Tank Number: | Not reported |
| Tank Size: | 2000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 14 |
| Test Method 2: | VacuTest |
| Leak Rate: | .00 |
| Gross Fail: | F |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 220471 |
| Operable Unit ID: | 1018835 |
| Operable Unit: | 01 |
| Material ID: | 362418 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

**AW291** **PARK LINCOLN MERC** **NY LTANKS** **S100140477**
**NNW** **55 KNOWLES ST** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.368 mi.**
**1945 ft.** **Site 1 of 3 in cluster AW**

**Relative:** **Lower**
**Actual:** **27 ft.**

LTANKS:

| | |
|---|---|
| Name: | PARK LINCOLN MERC |
| Address: | 55 KNOWLES ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 8807868 / 2005-04-30 |
| Facility ID: | 8807868 |
| Site ID: | 198033 |
| Spill Date: | 1988-12-28 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | D4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | WXWADSWO |
| Referred To: | Not reported |
| Reported to Dept: | 1988-12-28 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1989-01-09 |
| Spill Record Last Update: | 2005-04-30 |
| Spiller Name: | Not reported |
| Spiller Company: | SAME |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 164809 |
| Latitude: | 40.9246020 |
| Longitude: | -73.9035100 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was WADSWORTH 04/30/05 ADMINISTRATIVELY CLOSED AS PER DIRECTIVE FROM CENTRAL OFFIICE. |
| Remarks: | 2K .108GPH |

All TTF:

| | |
|---|---|
| Facility ID: | 8807868 |
| Spill Number: | 8807868 |
| Spill Tank Test: | 1535044 |
| Site ID: | 198033 |
| Tank Number: | Not reported |
| Tank Size: | 0 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |

**PARK LINCOLN MERC (Continued)** **S100140477**

| | |
|---|---|
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 198033 |
| Operable Unit ID: | 923342 |
| Operable Unit: | 01 |
| Material ID: | 452643 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**292**
**NNE**
**1/4-1/2**
**0.369 mi.**
**1946 ft.**

**EISSA - TTF** **NY LTANKS** **S116555742**
**65 HIGHLAND AVE** **N/A**
**YONKERS, NY**

**Relative:**
**Higher**

**Actual:**
**123 ft.**

LTANKS:

| | |
|---|---|
| Name: | EISSA - TTF |
| Address: | 65 HIGHLAND AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1400369 / 2019-01-11 |
| Facility ID: | 1400369 |
| Site ID: | 493606 |
| Spill Date: | 2014-04-10 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D5 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2014-04-11 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2014-04-11 |
| Spill Record Last Update: | 2019-01-11 |
| Spiller Name: | Not reported |
| Spiller Company: | EISSA |
| Spiller Address: | Not reported |

**EISSA - TTF (Continued)** **S116555742**

| | |
|---|---|
| Spiller County: | 999 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 448519 |
| Latitude: | 40.9251317 |
| Longitude: | -73.8991786 |
| DEC Memo: | 4/11/14 Spoke to Mr. Scorzelli, who said that several names of contractors have been given to the real estate agent, who will get it to the owner. Property is for sale. Not known if tank will be retested or pulled, as the tank test failure was an ullage failure. dw 1/11/19: Initial TTF report states this was an ullage failure, no evidence of a leak was found at that time. As per Homemetry.com: Pursuant to the sale history this possession was last sold in January 2015 for $420k to Lindsay Caprioni. Unknown at this time if UST was removed/replaced or retested. jod |
| Remarks: | TTF- ullage |

All Materials:

| | |
|---|---|
| Site ID: | 493606 |
| Operable Unit ID: | 1243113 |
| Operable Unit: | 01 |
| Material ID: | 2243781 |
| Material Code: | 9999 |
| Material Name: | other - nothing |
| Case No.: | Not reported |
| Material FA: | Other |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**AX293** **SPILL NUMBER 0205392** **NY LTANKS** **S104644747**
**SE** **75 BRUCE AVE** **NY Spills** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.369 mi.**
**1946 ft.** **Site 1 of 2 in cluster AX**

**Relative:** **Higher**
**Actual:** **124 ft.**

LTANKS:

| | |
|---|---|
| Name: | SPILL NUMBER 0205392 |
| Address: | 75 BRUCE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0205392 / 2002-08-22 |
| Facility ID: | 0205392 |
| Site ID: | 149230 |
| Spill Date: | 2002-08-22 |
| Spill Cause: | Tank Overfill |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 2002-08-22 |
| CID: | 257 |
| Water Affected: | Not reported |

**SPILL NUMBER 0205392 (Continued)** **S104644747**

| | |
|---|---|
| Spill Notifier: | Responsible Party |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2002-08-22 |
| Spill Record Last Update: | 2002-08-23 |
| Spiller Name: | CALLER |
| Spiller Company: | ABC TRANSPORT |
| Spiller Address: | 18-18 41ST ST |
| Spiller County: | 001 |
| Spiller Contact: | GABE WEBER |
| Spiller Phone: | (718) 626-4161 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 126969 |
| Latitude: | 40.9150901 |
| Longitude: | -73.8959877 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY 08/22/02 GABE WEBER REPORTED ABC TRANSPORT STAFF ENROUTE TO CLEANUP. NO DRAINS AFFECTED, SPILL OCCURRED IN A LANDSCAPED AREA. NFA REQUIRED AT THIS TIME. |
| Remarks: | tank overfill - super ordered to much oil |

All Materials:

| | |
|---|---|
| Site ID: | 149230 |
| Operable Unit ID: | 858060 |
| Operable Unit: | 01 |
| Material ID: | 519591 |
| Material Code: | 0003A |
| Material Name: | #6 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 15.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | + |
| Address: | 75 BRUCE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9516438 / 1996-03-21 |
| Facility ID: | 9516438 |
| Facility Type: | ER |
| DER Facility ID: | 126969 |
| Site ID: | 149231 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 1996-03-21 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1996-03-21 |

**SPILL NUMBER 0205392 (Continued)** **S104644747**

| | |
|---|---|
| CID: | 233 |
| Water Affected: | Not reported |
| Spill Source: | Tank Truck |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1996-03-21 |
| Spill Record Last Update: | 2005-11-08 |
| Spiller Name: | JIM CAREY |
| Spiller Company: | CASTLE OIL CORPORATION |
| Spiller Address: | 290 LOCUST AVENUE |
| Spiller Company: | 001 |
| Contact Name: | PEREZ |
| Latitude: | 40.9150901 |
| Longitude: | -73.8959877 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | faulty delivery hose on truck no sewer involved spill contained and being cleaned by driver |

All Materials:

| | |
|---|---|
| Site ID: | 149231 |
| Operable Unit ID: | 1027408 |
| Operable Unit: | 01 |
| Material ID: | 352953 |
| Material Code: | 0003A |
| Material Name: | #6 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 15.00 |
| Units: | G |
| Recovered: | 15.00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | IFO |
| Address: | 75 BRUCE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0205397 / 2003-12-09 |
| Facility ID: | 0205397 |
| Facility Type: | ER |
| DER Facility ID: | 126969 |
| Site ID: | 135267 |
| DEC Region: | 3 |
| Spill Cause: | Human Error |
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 2002-08-22 |
| Investigator: | TDGHIOSA |
| Referred To: | WESTCHESTER CNTY HEALTH DEPT |
| Reported to Dept: | 2002-08-22 |
| CID: | 365 |
| Water Affected: | Not reported |
| Spill Source: | Tank Truck |

**SPILL NUMBER 0205392 (Continued)** **S104644747**

| | |
|---|---|
| Spill Notifier: | Health Department |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2002-08-22 |
| Spill Record Last Update: | 2009-01-22 |
| Spiller Name: | Not reported |
| Spiller Company: | COUNTY OIL CO |
| Spiller Address: | Not reported |
| Spiller Company: | 001 |
| Contact Name: | NIXON ZALVIVAR - SUPER. |
| Latitude: | 40.9150901 |
| Longitude: | -73.8959877 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was WCHD-JACKSON 08/22/02 PREVIOUSLY REPORTED BY DELIVERY COMPANY. SEE 02-05392 12/09/03 CLEAN UP COMPLETED. SPILL CLOSED BY DANIELLE JACKSON OF WCHD. |
| Remarks: | TANK OVERFILL CAUSED SPILL TO LAWN, CONCRETE & A SMALL AMT TO THE BASEMENT OF THE BUILDING - OIL CO IS SUPPOSEDLY COMING BACK FOR CLEAN UP - FIRE DEPT WAS THERE BUT HAS LEFT - DEPT OF HEALTH IS STILL ON SCENE - NOTIFICATION ONLY AT THIS POINT |

All Materials:

| | |
|---|---|
| Site ID: | 135267 |
| Operable Unit ID: | 856836 |
| Operable Unit: | 01 |
| Material ID: | 519596 |
| Material Code: | 0003A |
| Material Name: | #6 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 50.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | POLE#W20695 |
| Address: | 75 BRUCE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0505671 / 2005-08-09 |
| Facility ID: | 0505671 |
| Facility Type: | ER |
| DER Facility ID: | 126969 |
| Site ID: | 350727 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 2005-08-08 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2005-08-08 |
| CID: | 409 |

**SPILL NUMBER 0205392 (Continued)** **S104644747**

| | |
|---|---|
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-08-08 |
| Spill Record Last Update: | 2008-10-07 |
| Spiller Name: | ERT DESK MIKE DAUGHTERY |
| Spiller Company: | POLE#W20695 |
| Spiller Address: | 75 BRUCE ST |
| Spiller Company: | 001 |
| Contact Name: | ERT DESK MIKE DAUGHTERY |
| Latitude: | 40.9150810 |
| Longitude: | -73.8959790 |
| DEC Memo: | e2mis 160350 |
| Remarks: | FOUR OUNCES. HAVE TO DEENERGIZE AN OVERHEAD TRANSFORMER. THEY BAGGED IT TO STOP THE LEAK. |

All Materials:

| | |
|---|---|
| Site ID: | 350727 |
| Operable Unit ID: | 1108282 |
| Operable Unit: | 01 |
| Material ID: | 2098221 |
| Material Code: | 0541A |
| Material Name: | dielectric fluid |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**294**
**SSW**
**1/4-1/2**
**0.372 mi.**
**1966 ft.**

**APARTMENT - TTF**
**525 RIVERDALE AVE**
**YONKERS, NY**

**NY LTANKS** **S113817885**
**NY Spills** **N/A**

**Relative:**
**Higher**

**Actual:**
**137 ft.**

LTANKS:

| | |
|---|---|
| Name: | APARTMENT - TTF |
| Address: | 525 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1407171 / 2017-04-04 |
| Facility ID: | 1407171 |
| Site ID: | 500673 |
| Spill Date: | 2014-10-08 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Non Major Facility > 1,100 gal |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | RDBENDEL |
| Referred To: | Not reported |

**APARTMENT - TTF (Continued)** **S113817885**

| | |
|---|---|
| Reported to Dept: | 2014-10-08 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2014-10-08 |
| Spill Record Last Update: | 2017-04-04 |
| Spiller Name: | Not reported |
| Spiller Company: | 525-527 Riverdale Avenue, LLC |
| Spiller Address: | 419 Park Avenue South |
| Spiller County: | 999 |
| Spiller Contact: | ROB HILL |
| Spiller Phone: | (718) 855-7272 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 438378 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 10-8-14 Called and left message for Rob to return call to dispatch desk. jm 10/09/14: PBS tank test failure. This is a 7,500 gallon vaulted AST. jod 040417, email PBS# 180432 Apartment Building 525-527 Riverdale Avenue Yonkers, NY 10705 Tightness test failure of a 7500 gallon #6 AST located in a vault on saddles, on a non-porous surface. After cleaning the tank failed a tightness test. The facility obtained a work permit and on 9/6/2016 East Coat Mechanical cleaned and disposed of the tank. No indication of release to environment. RDB |
| | Not reported |
| Remarks: | Tank test fail |

All Materials:

| | |
|---|---|
| Site ID: | 500673 |
| Operable Unit ID: | 1250074 |
| Operable Unit: | 01 |
| Material ID: | 2251751 |
| Material Code: | 0003A |
| Material Name: | #6 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | APT COMPLEX |
| Address: | 525 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1302715 / 2013-12-13 |
| Facility ID: | 1302715 |
| Facility Type: | ER |
| DER Facility ID: | 438378 |
| Site ID: | 483160 |

**APARTMENT - TTF (Continued)** **S113817885**

| | |
|---|---|
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B4 |
| SWIS: | 6018 |
| Spill Date: | 2013-06-12 |
| Investigator: | RDBENDEL |
| Referred To: | Not reported |
| Reported to Dept: | 2013-06-12 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2013-06-12 |
| Spill Record Last Update: | 2013-12-13 |
| Spiller Name: | CHRISTOPHER KANJA |
| Spiller Company: | WALTER AND SAMUELS MANAGEMENT CO |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | ROB HILL |
| Latitude: | 40.9143525 |
| Longitude: | -73.9022550 |
| DEC Memo: | 6/12/13 Rite Way Tank Maintenance is replacing a spill catchment basin, according to Chris Lalak.<br>The old one leaked. Spoke to Rob Hill at Rite Way who said that work is ongoing. Joe Mancini from<br>WCHD will be on site tomorrow. This is a WC PBS site. dw 7-26-13<br>requested update and FIR RDB PBS<br>3-108432 12-13-13, email from County 'Spill catchment basin leaked. Catch basin has been removed.<br>Requested closure. NFA RDB |
| Remarks: | cleanup in progress |

All Materials:

| | |
|---|---|
| Site ID: | 483160 |
| Operable Unit ID: | 1232880 |
| Operable Unit: | 01 |
| Material ID: | 2231738 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

**AV295** **PBS** **NY LTANKS** **S106471918**
**ESE** **70 WESTERN AVE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.379 mi.**
**2003 ft.** **Site 2 of 2 in cluster AV**

**Relative:** **Higher**

**Actual:** **82 ft.**

LTANKS:

| | |
|---|---|
| Name: | PBS |
| Address: | 70 WESTERN AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0403028 / 2007-08-29 |
| Facility ID: | 0403028 |
| Site ID: | 154308 |
| Spill Date: | 2004-06-18 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Non Major Facility > 1,100 gal |
| Spill Class: | B3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | WESTCHESTER CNTY HEALTH DEPT |
| Reported to Dept: | 2004-06-18 |
| CID: | 403 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2004-06-18 |
| Spill Record Last Update: | 2007-08-29 |
| Spiller Name: | JOHN BURKHART |
| Spiller Company: | Not reported |
| Spiller Address: | 70 WESTERN AVE |
| Spiller County: | 001 |
| Spiller Contact: | JOHN BURKHART |
| Spiller Phone: | (914) 438-3501 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 130862 |
| Latitude: | 40.9167993 |
| Longitude: | -73.8938574 |
| DEC Memo: | May 1, 2007 John Burkhardt The Municipal Housing Authority For the City of Yonkers 1511 Central Park Avenue Yonkers NY 10710 re: 52 Western Avenue, Yonkers PBS# 3-600078 DEC Spill # 0403028 Dear Mr. Burkhardt: The closure report, for the removal of the petroleum storage tanks #1 & 2 and the as-built plans for the installation of tanks 3 & 4 at the above referenced site was received and reviewed by this Department: The results of the soil samples taken were satisfactory when compared with the New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum #4046. At this time, this Department requires no further action as per the Westchester County Sanitary Code. Information regarding this spill is being forwarded to NYSDEC for appropriate action. Please note that in order to address and resolve this open spill case: 1. This Department acts pursuant to the Westchester County Sanitary Code and 2. The NYSDEC will act pursuant to New York State Laws and regulations (Article 12 of the Navigation |

**PBS (Continued)** **S106471918**

Law/Environmental Conservation Law and implementing regulations).
Sincerely, Stefan Goreau
Remarks: tank test failed.isolate and retest the tank

All TTF:
Facility ID: 0403028
Spill Number: 0403028
Spill Tank Test: 1529369
Site ID: 154308
Tank Number: 2
Tank Size: 4000
Material: Not reported
EPA UST: Not reported
UST: Not reported
Cause: Not reported
Source: Not reported
Test Method: 03
Test Method 2: Horner EZ Check I or II
Leak Rate: .00
Gross Fail: Not reported
Modified By: Spills
Last Modified Date: Not reported

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**AY296** **ST. PETERS SCHOOL** **NY LTANKS** **S100165636**
**NNW** **204 HAWTHORNE AVE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.381 mi.**
**2010 ft.** **Site 1 of 6 in cluster AY**

**Relative:**
**Lower**

**Actual:**
**50 ft.**

LTANKS:
Name: ST. PETERS SCHOOL
Address: 204 HAWTHORNE AVE
City,State,Zip: YONKERS, NY
Spill Number/Closed Date: 8704566 / 1987-10-21
Facility ID: 8704566
Site ID: 114871
Spill Date: 1987-09-01
Spill Cause: Tank Test Failure
Spill Source: Institutional, Educational, Gov., Other
Spill Class: Not reported
Cleanup Ceased: 1987-10-21
SWIS: 6018
Investigator: PATEL
Referred To: Not reported
Reported to Dept: 1987-09-01
CID: Not reported
Water Affected: Not reported
Spill Notifier: Tank Tester
Last Inspection: Not reported
Recommended Penalty: False
Meets Standard: True
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 1987-09-25
Spill Record Last Update: 1987-11-04
Spiller Name: Not reported
Spiller Company: SAME

**ST. PETERS SCHOOL (Continued)** **S100165636**

| | |
|---|---|
| Spiller Address: | Not reported |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 100160 |
| Latitude: | 40.9257920 |
| Longitude: | -73.9026150 |
| DEC Memo: | Not reported |
| Remarks: | 10K SYSTEM. -.184 GPH. TO E&I&R. CONTACT: SISTER EILEEN FAGAN |

All TTF:

| | |
|---|---|
| Facility ID: | 8704566 |
| Spill Number: | 8704566 |
| Spill Tank Test: | 1531531 |
| Site ID: | 114871 |
| Tank Number: | Not reported |
| Tank Size: | 0 |
| Material: | 0002 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 114871 |
| Operable Unit ID: | 908280 |
| Operable Unit: | 01 |
| Material ID: | 467198 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | Not reported |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**297**
**SW**
**1/4-1/2**
**0.383 mi.**
**2021 ft.**

**APARTMENT BLDG** **NY LTANKS** **S107410648**
**480 HAWTHORNE AVE** **N/A**
**YONKERS, NY**

**Relative:**
**Higher**

**Actual:**
**107 ft.**

LTANKS:

| | |
|---|---|
| Name: | APARTMENT BLDG |
| Address: | 480 HAWTHORNE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0507780 / 2005-11-27 |
| Facility ID: | 0507780 |

**APARTMENT BLDG (Continued)** **S107410648**

| | |
|---|---|
| Site ID: | 353264 |
| Spill Date: | 2005-09-28 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Non Major Facility > 1,100 gal |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODee |
| Referred To: | WCDOH |
| Reported to Dept: | 2005-09-28 |
| CID: | 406 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-09-28 |
| Spill Record Last Update: | 2005-11-27 |
| Spiller Name: | SAGE |
| Spiller Company: | APARTMENT BLDG |
| Spiller Address: | 480 HAWTHORN AVE. |
| Spiller County: | 001 |
| Spiller Contact: | SAGE |
| Spiller Phone: | (914) 906-4437 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 300584 |
| Latitude: | 40.9155360 |
| Longitude: | -73.9056350 |
| DEC Memo: | 11/27/05 Spill closed by Danielle Jackson of the Westchester County Health Dept. No further action required. jod As per email from WCHD: 05-07780 480 Hawthorne Ave, Yonkers, repaired and retested NFA: |
| Remarks: | PBS No: 3-600947 |

All TTF:

| | |
|---|---|
| Facility ID: | 0507780 |
| Spill Number: | 0507780 |
| Spill Tank Test: | 1549347 |
| Site ID: | 353264 |
| Tank Number: | 1 |
| Tank Size: | 2000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 353264 |

**APARTMENT BLDG (Continued)** **S107410648**

| | |
|---|---|
| Operable Unit ID: | 1110726 |
| Operable Unit: | 01 |
| Material ID: | 2100766 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**AZ298** **AMERICAN SUGAR REFINING, INC.** **NY MOSF S108413490**
**NW** **ONE FEDERAL STREET** **NY Spills N/A**
**1/4-1/2** **YONKERS, NY 10705**
**0.384 mi.**
**2025 ft.** **Site 1 of 4 in cluster AZ**

**Relative:**
**Lower**

**Actual:**
**8 ft.**

MOSF:

| | |
|---|---|
| Name: | AMERICAN SUGAR REFINING, INC. |
| Address: | ONE FEDERAL STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| Facility ID: | 3-2320 |
| Program Type: | MOSF |
| Tank Status: | Active |
| Expiration Date: | 03/31/2027 |
| Dec Region: | 3 |
| UTMX: | 592214.75345 |
| UTMY: | 4531446.33476 |

SPILLS:

| | |
|---|---|
| Name: | AMERICAN SUGAR REFINING, INC. |
| Address: | ONE FEDERAL STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| Spill Number/Closed Date: | 2307199 / Not Reported |
| Facility ID: | 2307199 |
| Facility Type: | ER |
| DER Facility ID: | 291642 |
| Site ID: | 659239 |
| DEC Region: | 3 |
| Spill Cause: | Unknown |
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 2023-05-31 |
| Investigator: | JPCUMMIN |
| Referred To: | Not reported |
| Reported to Dept: | 2023-11-29 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Major Facility (MOSF) > 400,000 gal |
| Spill Notifier: | DEC |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | Not reported |

**AMERICAN SUGAR REFINING, INC. (Continued)** **S108413490**

| | |
|---|---|
| Remediation Phase: | 1 |
| Date Entered In Computer: | 2023-11-29 |
| Spill Record Last Update: | 2023-11-30 |
| Spiller Name: | Not reported |
| Spiller Company: | American Sugar Refining |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | DEBORAH CASTON |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 11/29/23 Facility inspected 5/31/23. Review of monitoring well data required under license condition 2c shows hits of benzene above TOGS in MW 3 and/or MW 5 over 2018-2023 timeframe. VOC and SVOC hits noted in other wells also. jc |
| Remarks: | Spill reported as part of inspection review. See DEC remarks for details. |

All Materials:

| | |
|---|---|
| Site ID: | 659239 |
| Operable Unit ID: | 1406086 |
| Operable Unit: | 01 |
| Material ID: | 2423452 |
| Material Code: | 0579A |
| Material Name: | hydrocarbons |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**AW299** **CON EDISON - LUDLOW ST WORKS-YONKERS MGP** **EDR MGP** **1008408073**
**NNW** **KNOWLES STREET** **N/A**
**1/4-1/2** **YONKERS, NY 10705**
**0.387 mi.**
**2045 ft.** **Site 2 of 3 in cluster AW**

**Relative:** **Lower**

**Actual:** **13 ft.**

EDR MGP:

No additional information available

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**AX300** **APT HOUSE** **NY LTANKS** **S104191834**
**SE** **85 BRUCE AVE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.390 mi.**
**2059 ft.** **Site 2 of 2 in cluster AX**

**Relative:** **Higher**

**Actual:** **137 ft.**

LTANKS:

| | |
|---|---|
| Name: | APT HOUSE |
| Address: | 85 BRUCE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9906286 / 2004-06-10 |
| Facility ID: | 9906286 |
| Site ID: | 296853 |

**APT HOUSE (Continued)** **S104191834**

| | |
|---|---|
| Spill Date: | 1999-08-26 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | WCHD |
| Referred To: | Westchester Cnty Health Dept |
| Reported to Dept: | 1999-08-26 |
| CID: | 390 |
| Water Affected: | Not reported |
| Spill Notifier: | Responsible Party |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1999-08-26 |
| Spill Record Last Update: | 2004-06-15 |
| Spiller Name: | ROSEANNE |
| Spiller Company: | APT HOUSE |
| Spiller Address: | 160 GUY LOMBARDO AVE |
| Spiller County: | 001 |
| Spiller Contact: | MARIO COSMO |
| Spiller Phone: | (914) 679-7654 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 240214 |
| Latitude: | 40.9145675 |
| Longitude: | -73.8959727 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was WCHD-BADOLATO 12/01/99 LETTER SENT TO JOSE COLON BY WCHD; TANK SYSTEM MUST BE REPAIRED OR REMOVED. 06/10/04 TANK REMOVED IN MARCH OF 2000. NO CONTAMINATION FOUND. SPILL FILE CLOSED BY CINDY BADOLATO OF THE WESTCHESTER COUNTY HEALTH DEPT. jbo |
| Remarks: | tank failed test no product spilled |

All TTF:

| | |
|---|---|
| Facility ID: | 9906286 |
| Spill Number: | 9906286 |
| Spill Tank Test: | 1547542 |
| Site ID: | 296853 |
| Tank Number: | 1 |
| Tank Size: | 1500 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

**APT HOUSE (Continued)** **S104191834**

| | |
|---|---|
| Site ID: | 296853 |
| Operable Unit ID: | 1080731 |
| Operable Unit: | 01 |
| Material ID: | 302561 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**301 East 1/4-1/2 0.395 mi. 2085 ft.**

**MICHAEL - TTF** **NY LTANKS** **S109208831**
**346 VAN CORTLANDT PARK** **N/A**
**YONKERS, NY**

**Relative: Higher**

**Actual: 140 ft.**

LTANKS:

| | |
|---|---|
| Name: | MICHAEL - TTF |
| Address: | 346 VAN CORTLANDT PARK |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0805468 / 2013-12-05 |
| Facility ID: | 0805468 |
| Site ID: | 402572 |
| Spill Date: | 2008-08-11 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D5 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2008-08-12 |
| CID: | 404 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | Not reported |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2008-08-12 |
| Spill Record Last Update: | 2021-02-03 |
| Spiller Name: | VINCE MICHAEL |
| Spiller Company: | VINCE MICHAEL RESIDENCE |
| Spiller Address: | 346 VANCOURLANDT |
| Spiller County: | 001 |
| Spiller Contact: | VINCE MICHAEL |
| Spiller Phone: | (646) 542-4698 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 351778 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 8/4/10: Database review, report of a residential tank test failure. |

**MICHAEL - TTF (Continued)** **S109208831**

Unknown if any action was taken. No further information on the database. jod 12/05/2013 Tank Test Failure no indication within the last five years of a spills so it will be closed with the approval of Albany. JO M

Remarks: air leak failure; masa 2d

All TTF:

| | |
|---|---|
| Facility ID: | 0805468 |
| Spill Number: | 0805468 |
| Spill Tank Test: | 2486645 |
| Site ID: | 402572 |
| Tank Number: | Not reported |
| Tank Size: | 550 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | True |
| Cause: | 99 |
| Source: | 99 |
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 402572 |
| Operable Unit ID: | 1159323 |
| Operable Unit: | 01 |
| Material ID: | 2150440 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**AW302** **FORMER LUDLOW STREET WORKS** **NY BROWNFIELDS** **S120706220**
**NNW** **150 DOWNING, 55 & 58 KNOWLES AND 1 BRIDGE STREETS** **N/A**
**1/4-1/2** **YONKERS, NY 10705**
**0.399 mi.**
**2105 ft.** **Site 3 of 3 in cluster AW**

**Relative:** **Lower**
**Actual:** **19 ft.**

BROWNFIELDS:

| | |
|---|---|
| Name: | FORMER LUDLOW STREET WORKS |
| Address: | 150 DOWNING, 55 & 58 KNOWLES AND 1 BRIDGE STREETS |
| City,State,Zip: | YONKERS, NY 10705 |
| Program: | BCP |
| Site Code: | 545355 |
| Acres: | 3.460 |
| HW Code: | C360158 |
| SWIS: | 6018 |
| Town: | Yonkers (c) |
| Record Added Date: | 04/11/2017 |
| Record Updated Date: | 10/09/2024 |

**FORMER LUDLOW STREET WORKS (Continued)** **S120706220**

Update By: AMOMOROG

Site Description: Location The Site is located one-half mile west of the intersection of Ludlow Street and US Route 9 in the city of Yonkers and consists of four lots located at 150 Downing Street, 55 and 58 Knowles Street, and 1 Bridge Street. The Site is an irregular-shaped, 3.46-acre parcel, which has 273 feet of frontage on the southern side of Downing Street. Site Features A brief description of site features for each parcel comprising the Site is presented below: 150 Downing Street - A gravel lot and a one-story, concrete block structure are located in the southern portion of the parcel. The parcel is utilized by the City of Yonkers Department of Public Works (DPW) as a storage area, inclusive of salt, vehicle and equipment storage. The northern portion of the parcel is currently vacant. The northern and southern portions of the Site are separated by a concrete block retaining wall. The southern (lower) portion is approximately 16 feet above mean sea level (AMSL) and the northern (upper) portion is varies from 38 feet to 44 feet above sea level. 55 and 58 Knowles Street A two-story, metal commercial building is located in the northern portion of the parcel. A parking lot and metal salvage area are located in the southern portion of the parcel. 1 Bridge Street A two-story, concrete commercial building is located in the northern portion of the parcel and a parking lot is located in the southern portion of the parcel. Current Zoning and Land Use - The site is zoned for industrial and commercial use. Past Uses of the Site: 150 Downing Street Operation of a manufactured gas plant (MGP), gas holder station, lighting company, manufacturing of celluloid articles, cleaner and dyer facility, and bus storage and parking facility 55 Knowles Street Commercial facility for the Tide Water Oil Sales Corporation and metal manufacturing facility. 58 Knowles Street Coal bag and screen factory, gears manufacturer, and dress factory Note: Historical maps indicate that a small lake was present at the parcel circa 1886. 1 Bridge Street Operations involving wool extract from rags (per 1886 Sanborn map notation), plastic products manufacturing, and auto repair facility. Site Geology and Hydrogeology The Site is located in the Manhattan Prong section of the New England Uplands physiographic region of New York and is near a northeast-trending geologic contact between the Fordham Gneiss and the Inwood Marble. During the RI at the 150 Downing Street parcel, bedrock at the Site was encountered from approximately 39 to 50 feet below surface grade. The bedrock is overlain by glacial till deposits, alluvium, and fill material. The groundwater was typically encountered at 9 to 14 feet below ground surface in the southern area of the site and at 38 to 43 feet below ground surface in the northern area of the site. Based on previous environmental investigations, groundwater flow is to the west-northwest, towards the Hudson River.

Env Problem: The following is information gleaned from the ConEd Ludlow Street MGP site: Nature and Extent of Contamination: The primary contaminants of concern at the ConEd Ludlow Street MGP site are benzene, toluene, ethylbenzene and xylene (BTEX) and polycyclic aromatic hydrocarbons (PAHs). Non-aqueous phase liquid (NAPL) in the form of coal tar is present. Coal tar was found in the area of the former 22,800 cubic foot and 50,000 cubic foot gas holders, in an area of approximately 100 by 150 feet and at a depth of approximately 7 to 49 feet. Benzene was found in soil at concentrations up to 210 ppm, exceeding the commercial use SCO of 44 ppm. Total PAHs were found in soil at concentrations up to 13,460 ppm, exceeding the commercial use SCO of 500 ppm. The highest soil BTEX concentrations were found at the

**FORMER LUDLOW STREET WORKS (Continued)** **S120706220**

| | |
|---|---|
| | former 50,000 cubic foot gas holder location. Contaminants of concern were not detected in off-site groundwater. On-site groundwater exceeded groundwater standards in the central portion of the site. The highest levels of BTEX and PAHs were found in monitoring wells located adjacent to the 22,800 cubic foot and 50,000 cubic foot former gas holders. Benzene was found as high as 1,200 ppb, exceeding the groundwater standard of 1 ppb. |
| Health Problem: | Information submitted with the BCP application regarding the conditions at the site are currently under review and will be revised as additional information becomes available. |
| Dump: | False |
| Structure: | False |
| Lagoon: | False |
| Landfill: | False |
| Pond: | False |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | Not reported |
| Dell: | Not reported |
| Record Add: | 2017-12-01 15:58:00 |
| Record Upd: | 2019-05-24 12:11:00 |
| Updated By: | SMQUANDT |
| Own Op: | 1 |
| Sub Type: | P03 |
| Owner Name: | andrew maniglia |
| Owner Company: | Ludlow Point Development llc |
| Owner Address: | 100 summit drive 2nd fl |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | valhalla, NY 10595 |
| Owner Country: | United States of America |
| Own Op: | 6 |
| Sub Type: | P03 |
| Owner Name: | Andrew Maniglia |
| Owner Company: | Ludlow Point Development LLC |
| Owner Address: | 100 Summit Drive - 2nd Floor |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Valhalla, NY 10595 |
| Owner Country: | United States of America |
| Own Op: | Document Repository |
| Sub Type: | NNN |
| Owner Name: | Edward Falcone |
| Owner Company: | The Yonkers Public Library |
| Owner Address: | One Larkin Center |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701-7076 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | 06 |
| Owner Name: | susana oliveira |
| Owner Company: | Waverly Properties llc |
| Owner Address: | 55 knowles st |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | yonkers, NY 10705 |
| Owner Country: | United States of America |
| Own Op: | 6 |
| Sub Type: | P03 |
| Owner Name: | Douglas Ramsey |

**FORMER LUDLOW STREET WORKS (Continued)** **S120706220**

| | |
|---|---|
| Owner Company: | Bridgewater North Associates LLC |
| Owner Address: | 100 summit Drive |
| Owner Addr2: | 2nd Floor |
| Owner City,St,Zip: | Valhalla, NY 10595 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | C01 |
| Owner Name: | Not reported |
| Owner Company: | City of Yonkers |
| Owner Address: | 150 Downing Street |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10705 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | 06 |
| Owner Name: | MArtin Ginsberg |
| Owner Company: | 1-3 Pier LLC |
| Owner Address: | 100 Summit DriVE |
| Owner Addr2: | 2nd Floor |
| Owner City,St,Zip: | Valhalla, NY 10595 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | 06 |
| Owner Name: | Not reported |
| Owner Company: | 151 Ludlow LLC |
| Owner Address: | 100 Summit Drive |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Valhalla, NY 10075 |
| Owner Country: | United States of America |
| HW Code: | C360158 |
| Waste Type: | cis-1,2-dichloroethene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | benzo(g,h,i)perylene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | 1,1,1-Trichloroethane(TCA) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | vinyl chloride |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | copper |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | arsenic |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | benzo(a)anthracene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |

**FORMER LUDLOW STREET WORKS (Continued)** **S120706220**

| | |
|---|---|
| HW Code: | C360158 |
| Waste Type: | benzo(k)fluoranthene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | xylene (mixed) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | cadmium |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | trichloroethene (TCE) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | ethylbenzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | fluorene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | cyclohexane |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | methyl chloride |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | cyanides(soluble cyanide salts) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | toluene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | 2,2,4-trimethylpentane |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | nickel |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | beryllium |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | indeno(1,2,3-cd)pyrene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |

**FORMER LUDLOW STREET WORKS (Continued)** **S120706220**

| | |
|---|---|
| Waste Type: | carbon tetrachloride |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | fluoranthene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | benzo(a)pyrene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | lead |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | dibenz[a,h]anthracene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | acenaphthene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | benzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | dibenzofuran |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | heptane |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | chrysene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | pyrene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | chromium |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | naphthalene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | anthracene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | 1,2,4-trimethylbenzene |

**FORMER LUDLOW STREET WORKS (Continued)** **S120706220**

| | |
|---|---|
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | mercury |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | barium |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | benzo(b)fluoranthene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | selenium |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | 1,3,5-trimethylbenzene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | phenanthrene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360158 |
| Waste Type: | tetrachloroethene (PCE) |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| Crossref ID: | V00562 |
| Cross Ref Type Code: | 04 |
| Cross Ref Type: | VCP Site ID |
| Record Added Date: | 2017-04-13 09:36:00 |
| Record Updated: | 2017-04-13 09:36:00 |
| Updated By: | BRHUMPHR |
| Crossref ID: | 360171 |
| Cross Ref Type Code: | 02 |
| Cross Ref Type: | HW Site ID |
| Record Added Date: | 2020-02-12 14:03:00 |
| Record Updated: | 2020-02-12 14:03:00 |
| Updated By: | JTSPELLM |

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**303**
**ESE**
**1/4-1/2**
**0.399 mi.**
**2107 ft.**

**HOUSING PROJECT** **NY LTANKS** **S105135558**
**76 WESTERN AVE** **N/A**
**YONKERS, NY**

**Relative:**
**Higher**

**Actual:**
**84 ft.**

LTANKS:

| | |
|---|---|
| Name: | HOUSING PROJECT |
| Address: | 76 WESTERN AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0106684 / 2009-08-31 |
| Facility ID: | 0106684 |
| Site ID: | 187374 |
| Spill Date: | 2001-09-26 |
| Spill Cause: | Tank Test Failure |

**HOUSING PROJECT (Continued)** **S105135558**

| | |
|---|---|
| Spill Source: | Commercial/Industrial |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2001-09-26 |
| CID: | 199 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2001-09-26 |
| Spill Record Last Update: | 2021-07-06 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | MANNY (?) |
| Spiller Phone: | (914) 665-5800 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 156547 |
| Latitude: | 40.9166274 |
| Longitude: | -73.8937771 |
| DEC Memo: | 8/31/2009 -- Tank test failure from 8 years ago. The County would have followed up and let us know if there was a problem. No evidence of test method or applicability. NFA -- ELM |
| Remarks: | tank is being repaired tomarrow and will be retested on friday |

All TTF:

| | |
|---|---|
| Facility ID: | 0106684 |
| Spill Number: | 0106684 |
| Spill Tank Test: | 1526634 |
| Site ID: | 187374 |
| Tank Number: | 1 |
| Tank Size: | 4000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 20 |
| Test Method 2: | USTest 2000/P/LL plus USTest 2000/U |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 187374 |
| Operable Unit ID: | 844888 |
| Operable Unit: | 01 |
| Material ID: | 531534 |

**HOUSING PROJECT (Continued)** **S105135558**

| | |
|---|---|
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**BA304** **APT BLDG** **NY LTANKS** **S107522811**
**NE** **260 SOUTH BROADWAY** **NY Spills** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.400 mi.**
**2114 ft.** **Site 1 of 2 in cluster BA**

**Relative:**
**Higher**

**Actual:**
**97 ft.**

LTANKS:

| | |
|---|---|
| Name: | APT BLDG |
| Address: | 260 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9803514 / 1999-01-20 |
| Facility ID: | 9803514 |
| Site ID: | 252581 |
| Spill Date: | 1998-06-18 |
| Spill Cause: | Tank Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | A3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1998-06-18 |
| CID: | 383 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1998-06-18 |
| Spill Record Last Update: | 2006-02-09 |
| Spiller Name: | ALAN ZURETSKY |
| Spiller Company: | HARJEFF REALTY CORP |
| Spiller Address: | 60 MORROW AVE |
| Spiller County: | 001 |
| Spiller Contact: | JOE NANNIA |
| Spiller Phone: | (914) 963-2699 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 296047 |
| Latitude: | 40.9233020 |
| Longitude: | -73.8956136 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | Responsible party is supplier who was notified by spiller at time of call exact cause is not determined may be line failure or cause listed petroleum tank cleaners of brooklyn will evacuate the tank and |

**APT BLDG (Continued)** **S107522811**

start the necessary cleanup. Petroleum tank cleaners from Brooklyn completed cleanup. No further action.

All Materials:

| | |
|---|---|
| Site ID: | 252581 |
| Operable Unit ID: | 1064343 |
| Operable Unit: | 01 |
| Material ID: | 321834 |
| Material Code: | 0003A |
| Material Name: | #6 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 100.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | HARJEFF REALTY |
| Address: | 260 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0512947 / 2008-08-28 |
| Facility ID: | 0512947 |
| Facility Type: | ER |
| DER Facility ID: | 296047 |
| Site ID: | 359345 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2006-02-08 |
| Investigator: | JBODee |
| Referred To: | WCDOH |
| Reported to Dept: | 2006-02-08 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Private Dwelling |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | 2006-02-08 |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2006-02-08 |
| Spill Record Last Update: | 2016-10-14 |
| Spiller Name: | HARJEFF REALTY |
| Spiller Company: | HARJEFF REALTY |
| Spiller Address: | 260 SOUTH BROADWAY |
| Spiller Company: | 001 |
| Contact Name: | HARJEFF REALTY |
| Latitude: | 40.9232910 |
| Longitude: | -73.8956000 |
| DEC Memo: | 02/08/06 DEC site inspection. Spill of approximately 50 gallons of #4 oil from 2K temporary AST.<br>Permanent tank in the basement of building failed last July; see spill |

**APT BLDG (Continued)** **S107522811**

| | |
|---|---|
| Remarks: | 05-04679. Tank needs to be filled every three to four days. Castle Oil completing clean up. Temp tank set-up is unacceptable. Remote fill port is more than 200 feet from tank behind the building. Tank and vent are not visible from fill port. Fill port is also down gradient from tank and signs of previous spills from fill are evident. jod 02/09/06 Chris Lalak of the Westchester County Health Dept inspected site late in the evening after anonomous complaint that clean up had not been completed. Castle Oil to meet with him on site tomorrow. jod 02/10/06 Castle Oil completing clean up. WCHD on site. jod 8/28/08 Clean up was completed by Castle Oil and AL Eastman. Letter dated 8-8-08 received from Castle requesting closure. Original closure letter was erroneously sent to Region 2 office. Based upon information received, NFA required. jod 10/14/16: Original report in DecDocs. jod gauge failed and is oil is contained and in process of cleaning up; |

All Materials:

| | |
|---|---|
| Site ID: | 359345 |
| Operable Unit ID: | 1116561 |
| Operable Unit: | 01 |
| Material ID: | 2107000 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 30.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | ALAN TOWERS |
| Address: | 260 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0504679 / 2008-03-19 |
| Facility ID: | 0504679 |
| Facility Type: | ER |
| DER Facility ID: | 296047 |
| Site ID: | 349613 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2005-07-19 |
| Investigator: | TDGHIOSA |
| Referred To: | WCDOH |
| Reported to Dept: | 2005-07-19 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Non Major Facility > 1,100 gal |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |

**APT BLDG (Continued)** **S107522811**

| | |
|---|---|
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-07-20 |
| Spill Record Last Update: | 2023-03-13 |
| Spiller Name: | NICKY |
| Spiller Company: | HARJEFF REALTY |
| Spiller Address: | 260 SOUTH BROADWAY |
| Spiller Company: | 001 |
| Contact Name: | NICKY |
| Latitude: | 40.9232909 |
| Longitude: | -73.8956000 |
| DEC Memo: | PBS SITE, 10K TANK IN BASEMENT VAULT FAILED. jod 02/13/06 ALSO SEE SPILL 05-12947. jod 12/21/06 - Letter from Karen Magnuson of WCDOH dated 08/17/06, addressed to Alan Zaretsky of Harjeff Realty Co. 60 Morrow Ave., Scarsdale, NY 10583, states that documentation submitted by A. L. Eastmond & Sons Boiler Repair dated June 7, 2007, June 8 & July 14 has been reviewed. Groundwater assessment should be submitted to the Department by September 30, 2006. 12/22/06 - Letter from Karen Magnuson of WCDOH dated 6/2/06, addressed to Alan Zaretsky indicates that this spill requires further action. Not reported |
| Remarks: | LEAKED INTO BASEMENT, VAC TRUCK ENROUTE |

All Materials:

| | |
|---|---|
| Site ID: | 349613 |
| Operable Unit ID: | 1107202 |
| Operable Unit: | 01 |
| Material ID: | 2097096 |
| Material Code: | 0003A |
| Material Name: | #6 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 500.00 |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | 216658; 260 SOUTH BROADWAY |
| Address: | 260 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0914197 / 2009-05-10 |
| Facility ID: | 0914197 |
| Facility Type: | ER |
| DER Facility ID: | 386975 |
| Site ID: | 432956 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | D4 |
| SWIS: | 6018 |
| Spill Date: | 2009-05-01 |
| Investigator: | DMPOKRZY |
| Referred To: | Not reported |
| Reported to Dept: | 2009-03-30 |

**APT BLDG (Continued)** **S107522811**

| | |
|---|---|
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | Not reported |
| Last Inspection: | Not reported |
| Recommended Penalty: | Not reported |
| UST Trust: | Not reported |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2010-04-16 |
| Spill Record Last Update: | 2010-04-16 |
| Spiller Name: | ERT DESK |
| Spiller Company: | CON EDISON |
| Spiller Address: | 5030 BROADWAY |
| Spiller Company: | 001 |
| Contact Name: | ERT DESK |
| Latitude: | 40.9232966 |
| Longitude: | -73.8955952 |
| DEC Memo: | Not reported |
| Remarks: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 432956 |
| Operable Unit ID: | 1183867 |
| Operable Unit: | 01 |
| Material ID: | 2178083 |
| Material Code: | 0541A |
| Material Name: | dielectric fluid |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**AZ305** **FERNBROOK PARK & COMMUTER PARKING** **NY BROWNFIELDS S129128548**
**NW** **70 FERNBROOK STREET** **NY Spills N/A**
**1/4-1/2** **YONKERS, NY 10705**
**0.404 mi.**
**2135 ft.** **Site 2 of 4 in cluster AZ**

**Relative:** **Lower**
**Actual:** **4 ft.**

BROWNFIELDS:

| | |
|---|---|
| Name: | FERNBROOK PARK & COMMUTER PARKING |
| Address: | 70 FERNBROOK STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| Program: | BCP |
| Site Code: | 680038 |
| Acres: | 3.600 |
| HW Code: | C360264 |
| SWIS: | 6018 |
| Town: | Yonkers (c) |
| Record Added Date: | 06/26/2025 |
| Record Updated Date: | 09/19/2025 |
| Update By: | JLHATHAW |
| Site Description: | Location: The Site is located in an urban area at 70 Fernbrook Street, Yonkers, Westchester County, New York. The Site is identified |

**FERNBROOK PARK & COMMUTER PARKING (Continued)** **S129128548**

on local tax maps as: - Section 1; Block 615; Lots 1, 6, 10, 35, & 45 - Section 1; Block 622; Lots 1 & 8 - Section 1; Block 623; Lots 1 & 4 - Section 1; Block 600; Lot 1 (Portion of) Site Features: The current layout of the Site includes six structures. The northernmost structure at 102 Yerks Place (Block 622, Lot 8) is a two-story brick building, with an underground basement. 101 Pier Street (Block 622, Lot 1) contains a small one-story concrete building and a storage shed. 102 Pier Street (Block 615, Lot 10) contains a two-story office building with no basement, and two one-story trailers. 78 Pier Street (Block 615, Lot 35.45) contains a split-level building which is used both as offices and as a garage/vehicle maintenance building. The Site is paved throughout, except for the rear of the 102 Yerks Place building and the riverfront at Block 615, Lots 1 and 6. The Site is fenced on all sides, except along the Hudson River or where buildings are present. The northern portion of Block 600, Lot 1, which was formerly owned by Westchester County and is currently vacant, is fenced on all sides, except along the Hudson River. Current Zoning and Land Use: The northern portion of the Site is currently operated by All County Bus, a school bus depot, including parking, office space, and maintenance facilities for the buses. The southern portion of the Site is a parking lot that has remained vacant since the City of Yonkers acquired the lot in May of 2025. According to City of Yonkers public records, the area comprising and surrounding the Site is classified as Zoning Code I , or industrial properties, which includes commercial uses. One exception is 9 Water Grant Street (Block 623, Lot 4), which is waterfront and underwater property. Past Use of the Site: The Site has historically been developed for commercial/industrial use. Based upon a review of historical sources, the Site appears to have existed as a commercial ice-making facility in 1886, with further development noted by 1917, at which point the remainder of the subject property consisted of commercial/industrial properties for wood/coal storage, oil storage, and oil refining. These properties were identified in the Sanborn Maps as Pure Oil Co., Yonkers City Ice Co./Westchester Service Corporation, Hays & Randolph Co., and Gulf Refining Co, respectively. By 1971, the ice-making facility (Westchester Service Corporation) and wood/coal storage (Hays & Randolph Co.) were no longer present, and structures took their place in the southern properties comprising the Site. The Site was converted to its current state a parking lot for buses between 1991 and 1994. The Site is identified as Tarricone Terminal in the last available Sanborn Map in 2004. A. Tarricone Inc (ATI)/ATI Ludlow MOSF, was a major oil storage facility (MOSF) located in the northern limits of the Site, under the MOSF No. 3-2220. A foam house was constructed at the southeastern limits of 101 Pier Street for firefighting purposes, in the case of a petroleum release. Past remedial measures have not been identified for the Site. It is suspected that the sources of contamination on Site are to be related to the presence of historic petroleum bulk storage facilities mentioned above (Pure Oil Co. Tarricone Inc (ATI)/ATI Ludlow MOSF, Hays & Randolph Co., and Gulf Refining Co). It is also presumed that during redevelopment of the Site and the Yonkers waterfront, historic fill material was placed at the Site to bring the property to grade. Site Geology and Hydrogeology: The Site is located on the USGS 7.5-minute series topographic maps of Yonkers, NY. The Site grades towards the Hudson River to the west, staying generally flat. The site coordinates sit at an elevation of approximately 1 foot above mean sea level (msl). Groundwater depth was observed to be between

**FERNBROOK PARK & COMMUTER PARKING (Continued)** **S129128548**

| | |
|---|---|
| | approximately 5 to 8 feet below ground surface (bgs) and generally flows to the north. |
| Env Problem: | Information submitted with the BCP application regarding the environmental condition at the site are currently under review and will be revised as additional information becomes available. |
| Health Problem: | Information submitted with the BCP application regarding the conditions at the site are currently under review and will be revised as additional information becomes available. |
| Dump: | Not reported |
| Structure: | Not reported |
| Lagoon: | Not reported |
| Landfill: | Not reported |
| Pond: | Not reported |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | Not reported |
| Dell: | Not reported |
| Record Add: | Not reported |
| Record Upd: | Not reported |
| Updated By: | Not reported |
| Own Op: | 4 |
| Sub Type: | E |
| Owner Name: | Donald Gregory |
| Owner Company: | All County Bus, LLC |
| Owner Address: | 70 Fernbrook Street |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | C01 |
| Owner Name: | Susan Gerry |
| Owner Company: | City of Yonkers |
| Owner Address: | 40 South Broadway |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | Document Repository |
| Sub Type: | C01 |
| Owner Name: | Jesse Montero |
| Owner Company: | Yonkers Public Library Riverfront |
| Owner Address: | One Larkin Center |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | 6 |
| Sub Type: | P03 |
| Owner Name: | Susan Gerry |
| Owner Company: | City of Yonkers |
| Owner Address: | 40 South Broadway |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| HW Code: | Not reported |
| Waste Type: | Not reported |
| Waste Quantity: | Not reported |
| Waste Code: | Not reported |
| Crossref ID: | Not reported |

**FERNBROOK PARK & COMMUTER PARKING (Continued)** **S129128548**

| | |
|---|---|
| Cross Ref Type Code: | Not reported |
| Cross Ref Type: | Not reported |
| Record Added Date: | Not reported |
| Record Updated: | Not reported |
| Updated By: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | ALL COUNTY BUS/FORMER ATI MOSF |
| Address: | 70 FERNBROOK STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| Spill Number/Closed Date: | 2207990 / Not Reported |
| Facility ID: | 2207990 |
| Facility Type: | ER |
| DER Facility ID: | 593471 |
| Site ID: | 647283 |
| DEC Region: | 3 |
| Spill Cause: | Unknown |
| Spill Class: | Not reported |
| SWIS: | 6018 |
| Spill Date: | 2022-03-07 |
| Investigator: | JPCUMMIN |
| Referred To: | Not reported |
| Reported to Dept: | 2022-12-27 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Major Facility (MOSF) > 400,000 gal |
| Spill Notifier: | DEC |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | Not reported |
| Remediation Phase: | 1 |
| Date Entered In Computer: | 2022-12-27 |
| Spill Record Last Update: | 2023-06-08 |
| Spiller Name: | Tony Mauro |
| Spiller Company: | Saviano Enterprises, Inc. |
| Spiller Address: | 28 Reade Street |
| Spiller Company: | 999 |
| Contact Name: | TONY MAURO |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 12/27/22 Input spill based on findings in Phase II Site Assessment report submitted to Department by Gary Giglio on behalf of current property owner. Phase II was prepared for City of Yonkers, who is planning to purchase location. Current owner is Saviano Enterprises, who leases operation of most of the property to All County Bus. Based on discussion with All County Bus rep during 8/16/21 inspection, they do not have access to the northernmost building (12 Yerks). NOV was issued to Saviano Enterprises and Gary is their consultant. Phase II was performed in March 2022. Report offers that PID screening during borings ranged from 0.2 ppm to 500.8 ppm. Report also offers that numerous of the 14 borings exceeded CP-51 for SVOCs and VOCs. Metals |

**FERNBROOK PARK & COMMUTER PARKING (Continued)** **S129128548**

and total PCBs also found to
exceed unrestricted values. 2 wells sampled and results for VOCs and SVOCs above TOGS at both.
Spill not found consistent with the Phase II action and Gary did not provide a spill number. This
spill entered directly based on review of report. jc 6/8/23
Participated in Kilmer led call on BCP
pre-app. Follow-up email received from Kirsten Jedd-Barry/Alb DOW. She notes that if remediation
includes planned discharge of treated groundwater to either surface or groundwater a SPDES Permit
Equivalent (PEq) will be required. She notes that the process takes one to two months, and advises
an application would be needed to be submitted at least two months prior to remediation start. She
notes there is a fact sheet on Water Permits In-Site page. jc

Remarks: See DEC Remarks.

All Materials:

| | |
|---|---|
| Site ID: | 647283 |
| Operable Unit ID: | 1394257 |
| Operable Unit: | 01 |
| Material ID: | 2409807 |
| Material Code: | 0066A |
| Material Name: | unknown petroleum |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**306** **558 SOUTH BROADWAY** **UST FINDER RELEASE** **1029077184**
**SSE** **558 SOUTH BROADWAY S OF ROCKLEDGE PL** **N/A**
**1/4-1/2** **YONKERS, NY 0**
**0.408 mi.**
**2152 ft.**

**Relative:**
**Higher**

**Actual:**
**126 ft.**

UST FINDER RELEASE:

| | |
|---|---|
| Object ID: | 258946 |
| Facility ID: | NY64337 |
| Lust ID: | NY9608346 |
| Name: | 558 SOUTH BROADWAY |
| Address: | 558 SOUTH BROADWAY S OF ROCKLEDGE PL |
| City,State,Zip: | YONKERS, NY 0 |
| Address Match Type: | Not reported |
| Reported Date: | 1996/10/04 15:59:59+00 |
| Status: | Open |
| Substance: | Not reported |
| Population within 1500ft: | 10699 |
| Domestic Wells within 1500ft: | 0 |
| Land Use: | Developed, High Intensity |
| Within SPA: | No |
| SPA PWS Facility ID: | Not reported |
| SPA Water Type: | Not reported |
| SPA Facility Type: | Not reported |
| SPA HUC12: | Not reported |

**558 SOUTH BROADWAY (Continued)** **1029077184**

| | |
|---|---|
| Within WHPA: | No |
| WHPA PWS Facility ID: | Not reported |
| WHPA Water Type: | Not reported |
| WHPA Facility Type: | Not reported |
| WHPA HUC12: | Not reported |
| Within 100yr Floodplain: | No |
| Tribe: | Not reported |
| EPA Region: | 2 |
| NFA Letter 1: | Not reported |
| NFA Letter 2: | Not reported |
| NFA Letter 3: | Not reported |
| NFA Letter 4: | Not reported |
| Closed With Residual Contaminate: | Not reported |
| Coordinate Source: | State |
| X Coord: | -73.89687 |
| Y Coord: | 40.91529 |
| Latitude: | 40.9152899999999 |
| Longitude: | -73.89687 |

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**307 South 1/4-1/2 0.408 mi. 2156 ft.** **SHETH HOME** **NY LTANKS** **S108983051**
**20 LEHMAN TERRACE** **N/A**
**YONKERS, NY**

**Relative: Higher**

**Actual: 157 ft.**

LTANKS:

| | |
|---|---|
| Name: | SHETH HOME |
| Address: | 20 LEHMAN TERRACE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0711326 / 2008-04-21 |
| Facility ID: | 0711326 |
| Site ID: | 392787 |
| Spill Date: | 2008-01-28 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2008-01-28 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | Not reported |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2008-01-28 |
| Spill Record Last Update: | 2008-04-21 |
| Spiller Name: | HANSRAJ SHETH |
| Spiller Company: | SHETH HOME |
| Spiller Address: | 20 LEHMAN TERRACE |
| Spiller County: | 001 |
| Spiller Contact: | HANSRAJ SHETH |
| Spiller Phone: | (914) 969-0952 |
| Spiller Extention: | Not reported |

**SHETH HOME (Continued)** **S108983051**

DEC Region: 3
DER Facility ID: 342378
Latitude: 40.9136206
Longitude: -73.9011589
DEC Memo: April 21, 2008: NES removed and disposed of tank. No evidence of leak or contamination was found. Based upon information provided to DEC, No Further Action is required at this time. jod
Remarks: REPAIR OR REMOVE

All TTF:
Facility ID: 0711326
Spill Number: 0711326
Spill Tank Test: 2384556
Site ID: 392787
Tank Number: Not reported
Tank Size: 550
Material: 0001
EPA UST: Not reported
UST: True
Cause: Not reported
Source: Not reported
Test Method: 03
Test Method 2: Horner EZ Check I or II
Leak Rate: .00
Gross Fail: Not reported
Modified By: Watchdog
Last Modified Date: Not reported

All Materials:
Site ID: 392787
Operable Unit ID: 1149774
Operable Unit: 01
Material ID: 2140326
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: .00
Units: G
Recovered: .00
Oxygenate: Not reported

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**AY308** **CE- LUDLOW ST-YONKERS MGP** **NY VCP S105684709**
**NNW** **162 DOWNING STREET** **NY MGP N/A**
**1/4-1/2** **YONKERS, NY 10703**
**0.411 mi.**
**2172 ft.** **Site 2 of 6 in cluster AY**

**Relative:**
**Lower**

**Actual:**
**45 ft.**

VCP:
Name: CE- LUDLOW ST-YONKERS MGP
Address: 162 DOWNING STREET
City,State,Zip: YONKERS, NY 10703
Program Type: VCP
Site Code: 57099
HW Code: V00562
Site Class: N
SWIS: 6018

**CE- LUDLOW ST-YONKERS MGP (Continued)** **S105684709**

Region: 3
Town: Yonkers (c)
Acres: 1.350
Date Record Added: 03/06/2002
Date Record Updated: 02/26/2019
Updated By: AMOMOROG

Site Description: This site has been reassigned site number 360171. Location: The site is located at the intersection of Knowles Street and Bridge Street, approximately 300 feet northeast of the Ludlow rail station in Yonkers, Westchester County. The site is 1.35 acres in size. Site Features: The site is an empty lot, with the exception of a small (less than 100 square feet) concrete block structure located at the southeastern corner. The site is rectangular, roughly 440 by 130 (feet), with approximately one-third of the site is covered with gravel. The remainder of the site is overgrown and is approximately 20 feet higher due to the placement of additional fill and debris. The active Metropolitan Transportation Authority railroad is adjacent to the site to the west. A metal fabrication shop lies east of the site. A Dunkin Donuts bakery is across the street to the south. A vacant parcel exists adjacent to the north end of the site. Current Zoning and Land Use: The site is currently zoned industrial and is used by the Yonkers Department of Public Works for salt and general storage in the southern portion of the site. Land use in the vicinity of the site is characterized as mixed use industrial district, containing residential and commercial use properties. Past Use of the Site: Prior uses that may have contaminated the site include the operation of a manufactured gas plant between 1880 and 1898. The site was used as a gas holder station from 1898 to 1936. Site Geology and Hydrogeology: Fill materials (sand, gravel, cobbles, cement, brick and wood) extend from the surface to approximately 10 feet below grade in the southern portion of the site and to approximately 30 feet below grade in the northern portion. An alluvium deposit exists below the fill, consisting predominantly of sand with occasional silt and clay lenses. A schist bedrock was encountered at approximately 39 to 50 feet below ground surface. Groundwater on-site flows to the west northwest towards the Hudson River. The groundwater was typically encountered at 9 to 14 feet below ground surface in the southern area of the site and at 38 to 43 feet below ground surface in the northern area of the site. The site will be tracked under site number 360171 as of April 1, 2018.

Env Problem: Nature and Extent of Contamination: The primary contaminants of concern at the ConEd Ludlow Street MGP site are benzene, toluene, ethylbenzene and xylene (BTEX) and polycyclic aromatic hydrocarbons (PAHs). Non-aqueous phase liquid (NAPL) in the form of coal tar is present. NAPL was found generally in the area of the former 22,800 cubic foot and 50,000 cubic foot gas holders, an area approximately 100 by 150 feet , encompassing the current concrete block retaining wall. The NAPL was typically found within the alluvial deposit at ten to minus ten feet msl elevation. This corresponds to a depth of approximately 7 to 24 feet below grade south of the retaining wall. However, due to the abrupt rise in fill deposit north of the retaining wall, NAPL depth ranges from about 28 to 49 feet north of the retaining wall. (see Fig) Benzene was found in soil at concentrations up to 210 ppm, exceeding the commercial use SCO of 44 ppm. Total PAHs were found in soil at concentrations up to 13,460 ppm, exceeding the commercial use SCO of 500 ppm. The highest soil BTEX concentrations were found at the former 50,000 cubic foot gas

**CE- LUDLOW ST-YONKERS MGP (Continued)** **S105684709**

| | |
|---|---|
| | holder location. Contaminants of concern were not detected in off-site groundwater. On-site groundwater exceeded groundwater standards in the central portion of the site. The highest levels of BTEX and PAHs were found in monitoring wells located adjacent to the 22,800 cubic foot and 50,000 cubic foot former gas holders. Benzene was found as high as 1,200 ppb, exceeding the groundwater standard of 1 ppb. |
| Health Problem: | Persons who dig below the ground surface may come into contact with contaminants in subsurface soil. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. Furthermore, environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings. |
| Dump: | Not reported |
| Structure: | Not reported |
| Lagoon: | Not reported |
| Landfill: | Not reported |
| Pond: | Not reported |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | Not reported |
| Dell: | Not reported |
| Record Add: | Not reported |
| Record Upd: | Not reported |
| Updated By: | Not reported |
| Own Op: | 6 |
| Sub Type: | NNN |
| Owner Name: | Kenneth Kaiser |
| Owner Company: | CONSOLIDATED EDISON CO OF NY.,INC. |
| Owner Address: | 3101 20th Ave. Bldg 136 2nd floor |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Long Island City, NY 11105 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | ZZZ |
| Owner Name: | Not reported |
| Owner Company: | YONKERS DEPT OF PUBLIC WORKS |
| Owner Address: | YONKERS CITY HALL RM 311/40 BROADWAY |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | YONKERS, NY |
| Owner Country: | United States of America |
| HW Code: | Not reported |
| Waste Type: | Not reported |
| Waste Quantity: | Not reported |
| Waste Code: | Not reported |
| Crossref ID: | Not reported |
| Cross Ref Type Code: | Not reported |
| Cross Ref Type: | Not reported |
| Record Added Date: | Not reported |
| Record Updated: | Not reported |

**CE- LUDLOW ST-YONKERS MGP (Continued)** **S105684709**

Updated By: Not reported

MGP:

| | |
|---|---|
| Site ID: | Not reported |
| Name: | CE- LUDLOW ST-YONKERS MGP |
| Address: | 162 DOWNING STREET |
| City,State,Zip: | YONKERS, NY 10703 |
| Region: | 3 |
| Class: | No Further Action at this Time: Sites are given a classification of "N" when: the investigation and evaluation of a Class P site results in a determination that contamination at the site does not warrant placing the site on the Registry or it is being addressed under a brownfield program; a site was in a brownfield program (BCP, ERP or VCP) or other non-Registry program, remediation was not completed, and the site did not otherwise qualify for listing on the Registry. As an example, this occurs when a volunteer begins a brownfield project and then for economic or other reasons, determines they cannot complete the work and the brownfield project is terminated. If the contamination at the brownfield site qualifies it for placement on the Registry, the Department acts to do so. If the site re-enters a brownfield program, it can be reclassified to Class A (active) to indicate that work has recommenced; a site was identified simply as the location(s) where a drum(s) or other discrete waste was at one time present and subsequently removed by DEC or others and, based on the resulting conditions, no need for additional work was apparent; or an application to the BCP, ERP or VCP was submitted, and was then withdrawn or terminated before any actions were taken to investigate or remediate the site. |
| Swis Code: | 6018 |
| Town: | Yonkers (c) |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Acres: | 1.35 |
| Fuse: | Industrial |
| Description: | This site has been reassigned site number 360171. Location: The site is located at the intersection of Knowles Street and Bridge Street, approximately 300 feet northeast of the Ludlow rail station in Yonkers, Westchester County. The site is 1.35 acres in size. Site Features: The site is an empty lot, with the exception of a small (less than 100 square feet) concrete block structure located at the southeastern corner. The site is rectangular, roughly 440 by 130 (feet), with approximately one-third of the site is covered with gravel. The remainder of the site is overgrown and is approximately 20 feet higher due to the placement of additional fill and debris. The active Metropolitan Transportation Authority railroad is adjacent to the site to the west. A metal fabrication shop lies east of the site. A Dunkin Donuts bakery is across the street to the south. A vacant parcel exists adjacent to the north end of the site. Current Zoning and Land Use: The site is currently zoned industrial and is used by the Yonkers Department of Public Works for salt and general storage in the southern portion of the site. Land use in the vicinity of the site is characterized as mixed use industrial district, containing residential and commercial use properties. Past Use of the Site: Prior uses that may have contaminated the site include the operation of a manufactured gas plant between 1880 and 1898. The site was used as a gas holder station from 1898 to 1936. Site Geology and Hydrogeology: Fill materials (sand, gravel, cobbles, cement, brick |

**CE- LUDLOW ST-YONKERS MGP (Continued)** **S105684709**

and wood) extend from the surface to approximately 10 feet below grade in the southern portion of the site and to approximately 30 feet below grade in the northern portion. An alluvium deposit exists below the fill, consisting predominantly of sand with occasional silt and clay lenses. A schist bedrock was encountered at approximately 39 to 50 feet below ground surface. Groundwater on-site flows to the west northwest towards the Hudson River. The groundwater was typically encountered at 9 to 14 feet below ground surface in the southern area of the site and at 38 to 43 feet below ground surface in the northern area of the site. The site will be tracked under site number 360171 as of April 1, 2018.

Assess Env: Nature and Extent of Contamination: The primary contaminants of concern at the ConEd Ludlow Street MGP site are benzene, toluene, ethylbenzene and xylene (BTEX) and polycyclic aromatic hydrocarbons (PAHs). Non-aqueous phase liquid (NAPL) in the form of coal tar is present. NAPL was found generally in the area of the former 22,800 cubic foot and 50,000 cubic foot gas holders, an area approximately 100 by 150 feet , encompassing the current concrete block retaining wall. The NAPL was typically found within the alluvial deposit at ten to minus ten feet msl elevation. This corresponds to a depth of approximately 7 to 24 feet below grade south of the retaining wall. However, due to the abrupt rise in fill deposit north of the retaining wall, NAPL depth ranges from about 28 to 49 feet north of the retaining wall. (see Fig) Benzene was found in soil at concentrations up to 210 ppm, exceeding the commercial use SCO of 44 ppm. Total PAHs were found in soil at concentrations up to 13,460 ppm, exceeding the commercial use SCO of 500 ppm. The highest soil BTEX concentrations were found at the former 50,000 cubic foot gas holder location. Contaminants of concern were not detected in off-site groundwater. On-site groundwater exceeded groundwater standards in the central portion of the site. The highest levels of BTEX and PAHs were found in monitoring wells located adjacent to the 22,800 cubic foot and 50,000 cubic foot former gas holders. Benzene was found as high as 1,200 ppb, exceeding the groundwater standard of 1 ppb.

Assess Doh: Persons who dig below the ground surface may come into contact with contaminants in subsurface soil. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. Furthermore, environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings.

Latitude: 40.92529791
Longitude: -73.90392542

Site ID: 360171
Name: CE- LUDLOW ST-YONKERS MGP
Address: 162 DOWNING STREET
City,State,Zip: YONKERS, NY 10703
Region: 3
Class: Active: The classification assigned to a non-registry site in any

**CE- LUDLOW ST-YONKERS MGP (Continued)** **S105684709**

remedial program where work is underway and not yet complete (i. e., Brownfield Cleanup Program, Environmental Restoration Program, Voluntary Cleanup Program and RCRA Corrective action Program sites). This may be used for Manufactured Gas Plant sites or those being remediated under an EPA Cooperative Agreement.

Swis Code: 6018
Town: Yonkers (c)
Disp Start: Not reported
Disp Term: Not reported
Acres: 1.35
Fuse: Not Identified
Description: Location: The site is located at the intersection of Knowles Street and Bridge Street, approximately 300 feet northeast of the Ludlow rail station in Yonkers, Westchester County. The site is 1.35 acres in size. Site Features: The site is rectangular vacant lot, roughly 440 by 130 (feet), with approximately one-third of the site is covered with gravel. The remainder of the site is overgrown and is approximately 20 feet higher due to the placement of additional fill and debris. An active railroad is adjacent to the site to the west. A metal fabrication shop lies east of the site. A vacant lot is across the street to the south. A vacant parcel exists adjacent to the north end of the site. Current Zoning and Land Use: The site is currently zoned industrial and is not in use. Land use in the vicinity of the site is characterized as mixed use industrial district, containing residential and commercial use properties. Past Use of the Site: Prior uses that may have contaminated the site include the operation of a manufactured gas plant between 1880 and 1898. The site was used as a gas holder station from 1898 to 1936. Site Geology and Hydrogeology: Fill materials (sand, gravel, cobbles, cement, brick and wood) extend from the surface to approximately 10 feet below grade in the southern portion of the site and to approximately 30 feet below grade in the northern portion. An alluvium deposit exists below the fill, consisting predominantly of sand with occasional silt and clay lenses. A schist bedrock was encountered at approximately 39 to 50 feet below ground surface. Groundwater on-site flows to the west northwest towards the Hudson River. The groundwater was typically encountered at 9 to 14 feet below ground surface in the southern area of the site and at 38 to 43 feet below ground surface in the northern area of the site. This site had been tracked under V00562 thru March 31, 2018.
Assess Env: Nature and Extent of Contamination: The primary contaminants of concern at the site are benzene, toluene, ethylbenzene and xylene (BTEX) and polycyclic aromatic hydrocarbons (PAHs). Non-aqueous phase liquid (NAPL) in the form of coal tar is present. NAPL was found generally in the area of the former 22,800 cubic foot and 50,000 cubic foot gas holders, an area approximately 100 by 150 feet, encompassing the current concrete block retaining wall. The NAPL was typically found within the alluvial deposit at ten to minus ten feet msl elevation. This corresponds to a depth of approximately 7 to 24 feet below grade south of the retaining wall. However, due to the abrupt rise in fill deposit north of the retaining wall, NAPL depth ranges from about 28 to 49 feet north of the retaining wall. Benzene was found in soil at concentrations up to 210 ppm, exceeding the commercial use SCO of 44 ppm. Total PAHs were found in soil at concentrations up to 13,460 ppm, exceeding the commercial use SCO of 500 ppm. The highest soil BTEX concentrations were found at the former 50,000 cubic foot gas holder location. Contaminants of concern

**CE- LUDLOW ST-YONKERS MGP (Continued)** **S105684709**

were not detected in off-site groundwater. On-site groundwater exceeded groundwater standards in the central portion of the site. The highest levels of BTEX and PAHs were found in monitoring wells located adjacent to the 22,800 cubic foot and 50,000 cubic foot former gas holders. Benzene was found as high as 1,200 ppb, exceeding the groundwater standard of 1 ppb.

Assess Doh: Persons who dig below the ground surface may come into contact with contaminants in subsurface soil. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. Furthermore, environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings.

Latitude: 40.92529791
Longitude: -73.90392542

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**AY309** **CE- LUDLOW ST-YONKERS MGP** **NY SHWS** **S121933895**
**NNW** **162 DOWNING STREET** **N/A**
**1/4-1/2** **YONKERS, NY 10703**
**0.411 mi.**
**2172 ft.** **Site 3 of 6 in cluster AY**

**Relative:** **Lower**
**Actual:** **45 ft.**

SHWS:
Name: CE- LUDLOW ST-YONKERS MGP
Address: 162 DOWNING STREET
City,State,Zip: YONKERS, NY 10703
Program: HW
Site Code: 566784
Classification: A
Region: 3
Acres: 1.350
HW Code: 360171
Record Add: 02/13/2018
Record Upd: 04/07/2025
Updated By: AMOMOROG
Site Description: Location: The site is located at the intersection of Knowles Street and Bridge Street, approximately 300 feet northeast of the Ludlow rail station in Yonkers, Westchester County. The site is 1.35 acres in size. Site Features: The site is rectangular vacant lot, roughly 440 by 130 (feet), with approximately one-third of the site is covered with gravel. The remainder of the site is overgrown and is approximately 20 feet higher due to the placement of additional fill and debris. An active railroad is adjacent to the site to the west. A metal fabrication shop lies east of the site. A vacant lot is across the street to the south. A vacant parcel exists adjacent to the north end of the site. Current Zoning and Land Use: The site is currently zoned industrial and is not in use. Land use in the vicinity of the site is characterized as mixed use industrial district, containing residential and commercial use properties. Past Use of the Site: Prior uses that may have contaminated the site include the operation of a manufactured gas plant between 1880 and 1898. The site was used as a gas holder station from 1898 to 1936. Site Geology and

**CE- LUDLOW ST-YONKERS MGP (Continued)** **S121933895**

Hydrogeology: Fill materials (sand, gravel, cobbles, cement, brick and wood) extend from the surface to approximately 10 feet below grade in the southern portion of the site and to approximately 30 feet below grade in the northern portion. An alluvium deposit exists below the fill, consisting predominantly of sand with occasional silt and clay lenses. A schist bedrock was encountered at approximately 39 to 50 feet below ground surface. Groundwater on-site flows to the west northwest towards the Hudson River. The groundwater was typically encountered at 9 to 14 feet below ground surface in the southern area of the site and at 38 to 43 feet below ground surface in the northern area of the site. This site had been tracked under V00562 thru March 31, 2018.

Env Problem: Nature and Extent of Contamination: The primary contaminants of concern at the site are benzene, toluene, ethylbenzene and xylene (BTEX) and polycyclic aromatic hydrocarbons (PAHs). Non-aqueous phase liquid (NAPL) in the form of coal tar is present. NAPL was found generally in the area of the former 22,800 cubic foot and 50,000 cubic foot gas holders, an area approximately 100 by 150 feet, encompassing the current concrete block retaining wall. The NAPL was typically found within the alluvial deposit at ten to minus ten feet msl elevation. This corresponds to a depth of approximately 7 to 24 feet below grade south of the retaining wall. However, due to the abrupt rise in fill deposit north of the retaining wall, NAPL depth ranges from about 28 to 49 feet north of the retaining wall. Benzene was found in soil at concentrations up to 210 ppm, exceeding the commercial use SCO of 44 ppm. Total PAHs were found in soil at concentrations up to 13,460 ppm, exceeding the commercial use SCO of 500 ppm. The highest soil BTEX concentrations were found at the former 50,000 cubic foot gas holder location. Contaminants of concern were not detected in off-site groundwater. On-site groundwater exceeded groundwater standards in the central portion of the site. The highest levels of BTEX and PAHs were found in monitoring wells located adjacent to the 22,800 cubic foot and 50,000 cubic foot former gas holders. Benzene was found as high as 1,200 ppb, exceeding the groundwater standard of 1 ppb.

Health Problem: Persons who dig below the ground surface may come into contact with contaminants in subsurface soil. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. Furthermore, environmental sampling indicates soil vapor intrusion is not a concern for off-site buildings.

Dump: Not reported
Structure: Not reported
Lagoon: Not reported
Landfill: Not reported
Pond: Not reported
Disp Start: Not reported
Disp Term: Not reported
Lat/Long: Not reported
Dell: Not reported

**CE- LUDLOW ST-YONKERS MGP (Continued)** **S121933895**

| | |
|---|---|
| Record Add: | Not reported |
| Record Upd: | Not reported |
| Updated By: | Not reported |
| Own Op: | 6 |
| Sub Type: | NNN |
| Owner Name: | Kenneth Kaiser |
| Owner Company: | Consolidated Edison Company of NY, Inc. |
| Owner Address: | 3101 20th Ave. Bldg 136 2nd floor |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Long Island City, NY |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | 01 |
| Owner Name: | Not reported |
| Owner Company: | YONKERS DEPT OF PUBLIC WORKS |
| Owner Address: | YONKERS CITY HALL RM 311/40 BROADWAY |
| Owner Addr2: | Not reported |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| HW Code: | Not reported |
| Waste Type: | Not reported |
| Waste Quantity: | Not reported |
| Waste Code: | Not reported |
| Crossref ID: | V00562 |
| Cross Ref Type Code: | 04 |
| Cross Ref Type: | VCP Site ID |
| Record Added Date: | 2018-03-12 11:15:00 |
| Record Updated: | 2018-03-12 11:15:00 |
| Updated By: | JTSPELLM |
| Crossref ID: | C360158 |
| Cross Ref Type Code: | 22 |
| Cross Ref Type: | BCP Site ID |
| Record Added Date: | 2020-02-12 14:03:00 |
| Record Updated: | 2020-02-12 14:03:00 |
| Updated By: | JTSPELLM |

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**AY310** **CITY GARAGE** **UST FINDER RELEASE** **1029078343**
**NNW** **152 DOWNING STREET** **N/A**
**1/4-1/2** **YONKERS, NY 0**
**0.412 mi.**
**2174 ft.** **Site 4 of 6 in cluster AY**

**Relative:** **Lower**

**Actual:** **45 ft.**

UST FINDER RELEASE:

| | |
|---|---|
| Object ID: | 258776 |
| Facility ID: | NY78702 |
| Lust ID: | NY8911079 |
| Name: | CITY GARAGE |
| Address: | 152 DOWNING STREET |
| City,State,Zip: | YONKERS, NY 0 |
| Address Match Type: | Not reported |
| Reported Date: | 1990/02/21 15:59:59+00 |
| Status: | No Further Action |
| Substance: | Not reported |
| Population within 1500ft: | 7745 |
| Domestic Wells within 1500ft: | 6 |
| Land Use: | Developed, Low Intensity |
| Within SPA: | No |
| SPA PWS Facility ID: | Not reported |

**CITY GARAGE (Continued)** **1029078343**

| | |
|---|---|
| SPA Water Type: | Not reported |
| SPA Facility Type: | Not reported |
| SPA HUC12: | Not reported |
| Within WHPA: | No |
| WHPA PWS Facility ID: | Not reported |
| WHPA Water Type: | Not reported |
| WHPA Facility Type: | Not reported |
| WHPA HUC12: | Not reported |
| Within 100yr Floodplain: | No |
| Tribe: | Not reported |
| EPA Region: | 2 |
| NFA Letter 1: | Not reported |
| NFA Letter 2: | Not reported |
| NFA Letter 3: | Not reported |
| NFA Letter 4: | Not reported |
| Closed With Residual Contaminate: | Not reported |
| Coordinate Source: | State |
| X Coord: | -73.9030999999999 |
| Y Coord: | 40.92585 |
| Latitude: | 40.9258499999999 |
| Longitude: | -73.9030999999999 |

---

**AY311** **DOWNING ST GARAGE** **UST FINDER RELEASE** **1029078344**
**NNW** **152 DOWNING STREET** **N/A**
**1/4-1/2** **YONKERS, NY 0**
**0.412 mi.**
**2174 ft.** **Site 5 of 6 in cluster AY**

**Relative:** **Lower**
**Actual:** **45 ft.**

UST FINDER RELEASE:

| | |
|---|---|
| Object ID: | 258778 |
| Facility ID: | NY78702 |
| Lust ID: | NY9612799 |
| Name: | DOWNING ST GARAGE |
| Address: | 152 DOWNING STREET |
| City,State,Zip: | YONKERS, NY 0 |
| Address Match Type: | Not reported |
| Reported Date: | 1997/01/28 15:59:59+00 |
| Status: | No Further Action |
| Substance: | Not reported |
| Population within 1500ft: | 7745 |
| Domestic Wells within 1500ft: | 6 |
| Land Use: | Developed, Low Intensity |
| Within SPA: | No |
| SPA PWS Facility ID: | Not reported |
| SPA Water Type: | Not reported |
| SPA Facility Type: | Not reported |
| SPA HUC12: | Not reported |
| Within WHPA: | No |
| WHPA PWS Facility ID: | Not reported |
| WHPA Water Type: | Not reported |
| WHPA Facility Type: | Not reported |
| WHPA HUC12: | Not reported |
| Within 100yr Floodplain: | No |
| Tribe: | Not reported |
| EPA Region: | 2 |
| NFA Letter 1: | Not reported |
| NFA Letter 2: | Not reported |
| NFA Letter 3: | Not reported |

**DOWNING ST GARAGE (Continued)** **1029078344**

| | |
|---|---|
| NFA Letter 4: | Not reported |
| Closed With Residual Contaminate: | Not reported |
| Coordinate Source: | State |
| X Coord: | -73.9030999999999 |
| Y Coord: | 40.92585 |
| Latitude: | 40.9258499999999 |
| Longitude: | -73.9030999999999 |

---

**AY312** **YONKERS CITY GARAGE** **NY LTANKS** **S100140783**
**NNW** **152 DOWNING STREET** **NY AST** **N/A**
**1/4-1/2** **YONKERS, NY** **NY Spills**
**0.412 mi.**
**2174 ft.** **Site 6 of 6 in cluster AY**

**Relative:** **Lower**
**Actual:** **45 ft.**

LTANKS:

| | |
|---|---|
| Name: | DOWNING GARAGE |
| Address: | 152 DOWNING STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9004549 / 1990-07-24 |
| Facility ID: | 9004549 |
| Site ID: | 275491 |
| Spill Date: | 1990-07-24 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | D3 |
| Cleanup Ceased: | 1953-06-18 |
| SWIS: | 6018 |
| Investigator: | WXWADSWO |
| Referred To: | Not reported |
| Reported to Dept: | 1990-07-24 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | True |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1990-07-25 |
| Spill Record Last Update: | 2019-11-13 |
| Spiller Name: | Not reported |
| Spiller Company: | CITY OF YONKERS DPW |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 78702 |
| Latitude: | 40.9258507 |
| Longitude: | -73.9031010 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was WADSWORTH 07/24/90: REFER TO SPILL NUMBER 8911079 FOR FURTHER INFORMATION. 09/27/95: This is additional information about material spilled from the translation of the old spill file: TANK TEST. |
| Remarks: | 034,059 GROSS LEAK ON BOTH TANKS,HORNER EZY CHECK,WILL PUMP OUT TANKS AND PUT OUT BIDS FOR REMOVAL |

**YONKERS CITY GARAGE (Continued)** **S100140783**

All TTF:

| | |
|---|---|
| Facility ID: | 9004549 |
| Spill Number: | 9004549 |
| Spill Tank Test: | 1537348 |
| Site ID: | 275491 |
| Tank Number: | Not reported |
| Tank Size: | 0 |
| Material: | 0009 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 275491 |
| Operable Unit ID: | 942368 |
| Operable Unit: | 01 |
| Material ID: | 435636 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | Not reported |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | YONKERS CITY GARAGE |
| Address: | 152 DOWNING STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 8911079 / 1992-09-16 |
| Facility ID: | 8911079 |
| Site ID: | 85694 |
| Spill Date: | 1990-02-21 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | B3 |
| Cleanup Ceased: | 1953-06-18 |
| SWIS: | 6018 |
| Investigator: | WXWADSWO |
| Referred To: | Not reported |
| Reported to Dept: | 1990-02-21 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | True |

**YONKERS CITY GARAGE (Continued)** **S100140783**

| | |
|---|---|
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1990-02-22 |
| Spill Record Last Update: | 2019-11-13 |
| Spiller Name: | Not reported |
| Spiller Company: | Yonkers DPW |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 78702 |
| Latitude: | 40.9258507 |
| Longitude: | -73.9031010 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was WADSWORTH 09/27/95: This is additional information about material spilled from the translation of the old spill file: TANK TEST. |
| Remarks: | HORNER E-Z CHECK SYSTEMS TEST ALSO 5K GAS FAILED UNLEADED GROSS LEAK |

All TTF:

| | |
|---|---|
| Facility ID: | 8911079 |
| Spill Number: | 8911079 |
| Spill Tank Test: | 1536789 |
| Site ID: | 85694 |
| Tank Number: | Not reported |
| Tank Size: | 0 |
| Material: | 0008 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 85694 |
| Operable Unit ID: | 936603 |
| Operable Unit: | 01 |
| Material ID: | 440622 |
| Material Code: | 0008 |
| Material Name: | diesel |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | Not reported |
| Recovered: | .00 |
| Oxygenate: | Not reported |

WESTCHESTER CO. AST:

| | |
|---|---|
| Name: | DOWNING STREET GARAGE |
| Address: | 152 DOWNING STREET |
| City,State,Zip: | YONKERS, NY 10705 |

**YONKERS CITY GARAGE (Continued)** **S100140783**

| | |
|---|---|
| PBS Number: | 3-493961 |
| Site Status: | Unregulated: <1101 gal. PBS |
| GDS Number: | Not reported |
| Operator Name: | City Of Yonkers |
| Owner Name: | City Of Yonkers, Dept. of General Services |
| Owner Street: | 40 South Broadway |
| Owner Address2: | Not reported |
| Owner City/State/Zip: | Yonkers, NY 10701 |
| | |
| Tank Number: | 58 |
| Status: | 3. Closed - Removed |
| Date Installation: | Not reported |
| Capacity: | 1000 |
| Product Stored: | 0008. Diesel |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | Not reported |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 0. None |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 0. None |
| Piping Location: | 0. No Pipiing |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 0. None |
| Piping Leak Detection: | Not reported |
| Piping Secondary Containment: | Not reported |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | Not reported |
| Dispenser: | 2. Suction |

SPILLS:

| | |
|---|---|
| Name: | IN BACK OF GARAGE |
| Address: | 152 DOWNING STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9303594 / 1995-11-21 |
| Facility ID: | 9303594 |
| Facility Type: | ER |
| DER Facility ID: | 78702 |
| Site ID: | 87598 |
| DEC Region: | 3 |
| Spill Cause: | Deliberate |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 1993-06-04 |
| Investigator: | tdghiosa |
| Referred To: | WCDOH |
| Reported to Dept: | 1993-06-18 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Local Agency |
| Cleanup Ceased: | 1995-11-21 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |

**YONKERS CITY GARAGE (Continued)** **S100140783**

| | |
|---|---|
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1993-06-22 |
| Spill Record Last Update: | 2019-11-13 |
| Spiller Name: | Not reported |
| Spiller Company: | DPW |
| Spiller Address: | Not reported |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | 40.9258507 |
| Longitude: | -73.9031010 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | REFERED BY BILL BURKEY SAMPLING ADVISED PICKING UP APPLIANCES FROM ALL OVER YONKERS CRUSHING THEM THERE AND THEN DISPOSING SPOKE WITH BILL SCHNEIDER HE WILL INFORM CARLOS TORRES THEY WILL HANDLE |

All Materials:

| | |
|---|---|
| Site ID: | 87598 |
| Operable Unit ID: | 985394 |
| Operable Unit: | 01 |
| Material ID: | 397153 |
| Material Code: | 0066A |
| Material Name: | unknown petroleum |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | DOWNING DPW GARAGE |
| Address: | 152 DOWNING STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9612799 / 1997-07-01 |
| Facility ID: | 9612799 |
| Facility Type: | ER |
| DER Facility ID: | 78702 |
| Site ID: | 174302 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 1997-01-28 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1997-01-28 |
| CID: | 312 |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | True |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1997-01-28 |

**YONKERS CITY GARAGE (Continued)** **S100140783**

| | |
|---|---|
| Spill Record Last Update: | 2019-11-13 |
| Spiller Name: | Not reported |
| Spiller Company: | CITY OF YONKERS |
| Spiller Address: | CITY HALL |
| Spiller Company: | 001 |
| Contact Name: | ALBINA GLAZ |
| Latitude: | 40.9258507 |
| Longitude: | -73.9031010 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY 07/01/97 LETTER SENT; NFA. |
| Remarks: | CALLER REMOVING UST'S AND DISCOVERED CONTAMINATED SOIL |

All Materials:

| | |
|---|---|
| Site ID: | 174302 |
| Operable Unit ID: | 1040534 |
| Operable Unit: | 01 |
| Material ID: | 341447 |
| Material Code: | 0009 |
| Material Name: | gasoline |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | DPW |
| Address: | 152 DOWNING STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 8901508 / 1989-05-15 |
| Facility ID: | 8901508 |
| Facility Type: | ER |
| DER Facility ID: | 78702 |
| Site ID: | 270972 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | Not reported |
| SWIS: | 6018 |
| Spill Date: | 1989-05-15 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1989-05-15 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial Vehicle |
| Spill Notifier: | Affected Persons |
| Cleanup Ceased: | 1989-05-15 |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1989-05-18 |
| Spill Record Last Update: | 1989-07-25 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |

**YONKERS CITY GARAGE (Continued)** **S100140783**

| | |
|---|---|
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Latitude: | 40.9258507 |
| Longitude: | -73.9031010 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was TODD GHIOSAY / / : AS PER WCHD N.F.A. / / : AS PER WCHD N.F.A. |
| Remarks: | PICKED UP GARBAGE 3 1 GAL. BOTTLES 1-ACETON 1 SODIUM HYOROXIDE/ 1 - PAINT THINNER. NOW SMOKING. WCHD TO RESPOND |

All Materials:

| | |
|---|---|
| Site ID: | 270972 |
| Operable Unit ID: | 928778 |
| Operable Unit: | 01 |
| Material ID: | 449250 |
| Material Code: | 0066A |
| Material Name: | unknown petroleum |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**313**
**NW**
**1/4-1/2**
**0.416 mi.**
**2197 ft.**

**A. TARRICONE INC.**
**FOOT OF LUDLOW STREET**
**YONKERS, NY 10705**

**NY MOSF** **S102636376**
**NY MOSF AST** **N/A**

**Relative:**
**Lower**

**Actual:**
**0 ft.**

MOSF:

| | |
|---|---|
| Name: | A. TARRICONE INC. |
| Address: | FOOT OF LUDLOW STREET |
| City,State,Zip: | YONKERS, NY 10705 |
| Facility ID: | 3-2220 |
| Program Type: | MOSF |
| Tank Status: | Inactive |
| Expiration Date: | Not reported |
| Dec Region: | 3 |
| UTMX: | Not reported |
| UTMY: | Not reported |

MOSF AST:

| | |
|---|---|
| MOSF Number: | 3-2220 |
| SWIS Code: | 55 |
| Facility Town: | YONKERS |
| Facility Phone: | (914) 478-2220 |
| Emergency Contact Name: | GLEN D'AMBROSIO |
| Emergency Contact Phone: | (914) 478-2220 |
| Total Tanks: | 14 |
| Total Capacity: | 2612009 |
| Daily Throughput: | 65000 |
| License Status: | Not reported |
| Facility Type: | STORAGE TERMINAL/PETROLEUM DISTRIBUTOR |
| Product Transfer Operation: | AC |
| Facility Status: | TEMPORARILY OUT-OF-SERVICE |

**A. TARRICONE INC. (Continued)** **S102636376**

| | |
|---|---|
| Operator Name: | GLEN D'AMBROSIO |
| Owner Name: | A. TARRICONE INC. |
| Owner Address: | 1337 SAW MILL RIVER RD. |
| Owner City,St,Zip: | HASTINGS ON HUDSON, NY 10706- |
| Owner Phone: | (914) 478-5970 |
| Owner Type: | Corporate/Commercial |
| Owner Status: | 1 |
| Owner Mark: | First Owner |
| Mailing Name: | A. TARRICONE INC. |
| Mailing Address: | 1337 SAW MILL RIVER RD. |
| Mailing Address 2: | Not reported |
| Mailing City,St,Zip: | HASTINGS ON HUDSON, NY 10706- |
| Mailing Contact: | GLEN D'AMBROSIO |
| Mailing Phone: | (914) 478-5970 |
| Legal Agent Name: | L.W. VAN ZANDT |
| Legal Agent Address: | 13 WASHINGTON AVENUE |
| Legal Agent City,St,Zip: | PEARL RIVER, NY 10965- |
| LIC Expires: | 03/31/1991 |

| | |
|---|---|
| Tank ID: | 1 |
| Tank Location: | ABOVEGROUND |
| Install Date: | 00/00 |
| Product: | UNLEADED GASOLINE |
| Tank Type: | Steel/carbon steel |
| Tank Internal: | None |
| Tank External: | NONE |
| Pipe Location: | Aboveground |
| Pipe Type: | Steel/Iron |
| Pipe Internal: | None |
| Pipe External: | None |
| Secondary Containment: | Concrete Dike |
| Leak Detection: | 09 |
| Overfill Protection: | Product Level Gauge |
| Dispensing Mthd: | Suction |
| Test Date: | 09/83 |
| Date Closed: | Not reported |
| Status of Data: | Complete |
| Capacity (gal): | 169579 |
| Lat/Long: | 40\|56\|20 / 73\|54\|10 |
| Federal ID: | Not reported |
| Inspected Date: | / / |
| Inspector: | Not reported |
| Renew Date: | 10/30/1991 |
| Inspected State: | Not reported |
| Pipe Flag: | True |
| Vessel ID: | Not reported |
| Reserve Flag: | True |
| Tank Status: | In Service |
| COI Date: | / / |
| Date License Issued: | 07/11/1990 |
| Date License Application Received: | 03/04/1991 |
| Chemical Bulk Storage Number: | Not reported |
| Pollution Discharge Elimination System Num: | 0-099546 |
| Date Legal Agent Filed with Secretary of State: | 12/60 |

| | |
|---|---|
| Tank ID: | 2 |

**A. TARRICONE INC. (Continued)** **S102636376**

| | |
|---|---|
| Tank Location: | ABOVEGROUND |
| Install Date: | 00/00 |
| Product: | UNLEADED GASOLINE |
| Tank Type: | Steel/carbon steel |
| Tank Internal: | None |
| Tank External: | NONE |
| Pipe Location: | Aboveground |
| Pipe Type: | Steel/Iron |
| Pipe Internal: | None |
| Pipe External: | None |
| Secondary Containment: | Concrete Dike |
| Leak Detection: | 09 |
| Overfill Protection: | Product Level Gauge |
| Dispensing Mthd: | Suction |
| Test Date: | 09/83 |
| Date Closed: | Not reported |
| Status of Data: | Complete |
| Capacity (gal): | 169556 |
| Lat/Long: | 40\|56\|20 / 73\|54\|10 |
| Federal ID: | Not reported |
| Inspected Date: | / / |
| Inspector: | Not reported |
| Renew Date: | 10/30/1991 |
| Inspected State: | Not reported |
| Pipe Flag: | True |
| Vessel ID: | Not reported |
| Reserve Flag: | True |
| Tank Status: | In Service |
| COI Date: | / / |
| Date License Issued: | 07/11/1990 |
| Date License Application Received: | 03/04/1991 |
| Chemical Bulk Storage Number: | Not reported |
| Pollution Discharge Elimination System Num: | 0-099546 |
| Date Legal Agent Filed with Secretary of State: | 12/60 |

| | |
|---|---|
| Tank ID: | 3 |
| Tank Location: | ABOVEGROUND |
| Install Date: | 00/00 |
| Product: | LEADED GASOLINE |
| Tank Type: | Steel/carbon steel |
| Tank Internal: | None |
| Tank External: | NONE |
| Pipe Location: | Aboveground |
| Pipe Type: | Steel/Iron |
| Pipe Internal: | None |
| Pipe External: | None |
| Secondary Containment: | Concrete Dike |
| Leak Detection: | 09 |
| Overfill Protection: | Product Level Gauge |
| Dispensing Mthd: | Suction |
| Test Date: | 09/83 |
| Date Closed: | Not reported |
| Status of Data: | Complete |
| Capacity (gal): | 169541 |
| Lat/Long: | 40\|56\|20 / 73\|54\|10 |
| Federal ID: | Not reported |

**A. TARRICONE INC. (Continued)** **S102636376**

Inspected Date: / /
Inspector: Not reported
Renew Date: 10/30/1991
Inspected State: Not reported
Pipe Flag: True
Vessel ID: Not reported
Reserve Flag: True
Tank Status: In Service
COI Date: / /
Date License Issued: 07/11/1990
Date License Application Received: 03/04/1991
Chemical Bulk Storage Number: Not reported
Pollution Discharge Elimination System Num: 0-099546
Date Legal Agent Filed with Secretary of State: 12/60

Tank ID: 4
Tank Location: ABOVEGROUND
Install Date: 00/00
Product: LEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: None
Tank External: NONE
Pipe Location: Aboveground
Pipe Type: Steel/Iron
Pipe Internal: None
Pipe External: None
Secondary Containment: Concrete Dike
Leak Detection: 09
Overfill Protection: Product Level Gauge
Dispensing Mthd: Suction
Test Date: 09/83
Date Closed: Not reported
Status of Data: Complete
Capacity (gal): 169565
Lat/Long: 40|56|20 / 73|54|10
Federal ID: Not reported
Inspected Date: / /
Inspector: Not reported
Renew Date: 10/30/1991
Inspected State: Not reported
Pipe Flag: True
Vessel ID: Not reported
Reserve Flag: True
Tank Status: In Service
COI Date: / /
Date License Issued: 07/11/1990
Date License Application Received: 03/04/1991
Chemical Bulk Storage Number: Not reported
Pollution Discharge Elimination System Num: 0-099546
Date Legal Agent Filed with Secretary of State: 12/60

Tank ID: 5
Tank Location: ABOVEGROUND
Install Date: 00/00
Product: UNLEADED GASOLINE

**A. TARRICONE INC. (Continued)** **S102636376**

| | |
|---|---|
| Tank Type: | Steel/carbon steel |
| Tank Internal: | None |
| Tank External: | NONE |
| Pipe Location: | Aboveground |
| Pipe Type: | Steel/Iron |
| Pipe Internal: | None |
| Pipe External: | None |
| Secondary Containment: | Concrete Dike |
| Leak Detection: | 09 |
| Overfill Protection: | Product Level Gauge |
| Dispensing Mthd: | Suction |
| Test Date: | 09/83 |
| Date Closed: | Not reported |
| Status of Data: | Complete |
| Capacity (gal): | 449521 |
| Lat/Long: | 40\|56\|20 / 73\|54\|10 |
| Federal ID: | Not reported |
| Inspected Date: | / / |
| Inspector: | Not reported |
| Renew Date: | 10/30/1991 |
| Inspected State: | Not reported |
| Pipe Flag: | True |
| Vessel ID: | Not reported |
| Reserve Flag: | True |
| Tank Status: | In Service |
| COI Date: | / / |
| Date License Issued: | 07/11/1990 |
| Date License Application Received: | 03/04/1991 |
| Chemical Bulk Storage Number: | Not reported |
| Pollution Discharge Elimination System Num: | 0-099546 |
| Date Legal Agent Filed with Secretary of State: | 12/60 |

| | |
|---|---|
| Tank ID: | 6 |
| Tank Location: | ABOVEGROUND |
| Install Date: | 00/00 |
| Product: | UNLEADED GASOLINE |
| Tank Type: | Steel/carbon steel |
| Tank Internal: | Glass Liner |
| Tank External: | NONE |
| Pipe Location: | Aboveground |
| Pipe Type: | Steel/Iron |
| Pipe Internal: | None |
| Pipe External: | None |
| Secondary Containment: | Concrete Dike |
| Leak Detection: | 09 |
| Overfill Protection: | Product Level Gauge |
| Dispensing Mthd: | Suction |
| Test Date: | 04/85 |
| Date Closed: | Not reported |
| Status of Data: | Complete |
| Capacity (gal): | 251711 |
| Lat/Long: | 40\|56\|20 / 73\|54\|10 |
| Federal ID: | Not reported |
| Inspected Date: | / / |
| Inspector: | Not reported |
| Renew Date: | 10/30/1991 |

**A. TARRICONE INC. (Continued)** **S102636376**

Inspected State: Not reported
Pipe Flag: True
Vessel ID: Not reported
Reserve Flag: True
Tank Status: In Service
COI Date: / /
Date License Issued: 07/11/1990
Date License Application Received: 03/04/1991
Chemical Bulk Storage Number: Not reported
Pollution Discharge Elimination System Num: 0-099546
Date Legal Agent Filed with Secretary of State: 12/60

Tank ID: 7
Tank Location: ABOVEGROUND
Install Date: 00/00
Product: UNLEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Glass Liner
Tank External: NONE
Pipe Location: Aboveground
Pipe Type: Steel/Iron
Pipe Internal: None
Pipe External: None
Secondary Containment: Concrete Dike
Leak Detection: 09
Overfill Protection: Product Level Gauge
Dispensing Mthd: Suction
Test Date: 10/84
Date Closed: Not reported
Status of Data: Complete
Capacity (gal): 109832
Lat/Long: 40|56|20 / 73|54|10
Federal ID: Not reported
Inspected Date: / /
Inspector: Not reported
Renew Date: 10/30/1991
Inspected State: Not reported
Pipe Flag: True
Vessel ID: Not reported
Reserve Flag: True
Tank Status: In Service
COI Date: / /
Date License Issued: 07/11/1990
Date License Application Received: 03/04/1991
Chemical Bulk Storage Number: Not reported
Pollution Discharge Elimination System Num: 0-099546
Date Legal Agent Filed with Secretary of State: 12/60

Tank ID: 9
Tank Location: ABOVEGROUND
Install Date: 00/00
Product: UNLEADED GASOLINE
Tank Type: Steel/carbon steel
Tank Internal: Glass Liner
Tank External: NONE

**A. TARRICONE INC. (Continued)** **S102636376**

| | |
|---|---|
| Pipe Location: | Aboveground |
| Pipe Type: | Steel/Iron |
| Pipe Internal: | None |
| Pipe External: | None |
| Secondary Containment: | Concrete Dike |
| Leak Detection: | 09 |
| Overfill Protection: | Product Level Gauge |
| Dispensing Mthd: | Suction |
| Test Date: | 12/84 |
| Date Closed: | Not reported |
| Status of Data: | Complete |
| Capacity (gal): | 158224 |
| Lat/Long: | 40\|56\|20 / 73\|54\|10 |
| Federal ID: | Not reported |
| Inspected Date: | / / |
| Inspector: | Not reported |
| Renew Date: | 10/30/1991 |
| Inspected State: | Not reported |
| Pipe Flag: | True |
| Vessel ID: | Not reported |
| Reserve Flag: | True |
| Tank Status: | In Service |
| COI Date: | / / |
| Date License Issued: | 07/11/1990 |
| Date License Application Received: | 03/04/1991 |
| Chemical Bulk Storage Number: | Not reported |
| Pollution Discharge Elimination System Num: | 0-099546 |
| Date Legal Agent Filed with Secretary of State: | 12/60 |

| | |
|---|---|
| Tank ID: | 10 |
| Tank Location: | ABOVEGROUND |
| Install Date: | 00/00 |
| Product: | UNLEADED GASOLINE |
| Tank Type: | Steel/carbon steel |
| Tank Internal: | Glass Liner |
| Tank External: | NONE |
| Pipe Location: | Aboveground |
| Pipe Type: | Steel/Iron |
| Pipe Internal: | None |
| Pipe External: | None |
| Secondary Containment: | Concrete Dike |
| Leak Detection: | 09 |
| Overfill Protection: | Product Level Gauge |
| Dispensing Mthd: | Suction |
| Test Date: | 12/84 |
| Date Closed: | Not reported |
| Status of Data: | Complete |
| Capacity (gal): | 158106 |
| Lat/Long: | 40\|56\|20 / 73\|54\|10 |
| Federal ID: | Not reported |
| Inspected Date: | / / |
| Inspector: | Not reported |
| Renew Date: | 10/30/1991 |
| Inspected State: | Not reported |
| Pipe Flag: | True |
| Vessel ID: | Not reported |

**A. TARRICONE INC. (Continued)** **S102636376**

| | |
|---|---|
| Reserve Flag: | True |
| Tank Status: | In Service |
| COI Date: | / / |
| Date License Issued: | 07/11/1990 |
| Date License Application Received: | 03/04/1991 |
| Chemical Bulk Storage Number: | Not reported |
| Pollution Discharge Elimination System Num: | 0-099546 |
| Date Legal Agent Filed with Secretary of State: | 12/60 |

| | |
|---|---|
| Tank ID: | 11 |
| Tank Location: | ABOVEGROUND |
| Install Date: | 00/00 |
| Product: | UNLEADED GASOLINE |
| Tank Type: | Steel/carbon steel |
| Tank Internal: | None |
| Tank External: | NONE |
| Pipe Location: | Aboveground |
| Pipe Type: | Steel/Iron |
| Pipe Internal: | None |
| Pipe External: | None |
| Secondary Containment: | Concrete Dike |
| Leak Detection: | 09 |
| Overfill Protection: | Product Level Gauge |
| Dispensing Mthd: | Suction |
| Test Date: | 09/83 |
| Date Closed: | Not reported |
| Status of Data: | Complete |
| Capacity (gal): | 176311 |
| Lat/Long: | 40\|56\|20 / 73\|54\|10 |
| Federal ID: | Not reported |
| Inspected Date: | / / |
| Inspector: | Not reported |
| Renew Date: | 10/30/1991 |
| Inspected State: | Not reported |
| Pipe Flag: | True |
| Vessel ID: | Not reported |
| Reserve Flag: | True |
| Tank Status: | In Service |
| COI Date: | / / |
| Date License Issued: | 07/11/1990 |
| Date License Application Received: | 03/04/1991 |
| Chemical Bulk Storage Number: | Not reported |
| Pollution Discharge Elimination System Num: | 0-099546 |
| Date Legal Agent Filed with Secretary of State: | 12/60 |

Click this hyperlink while viewing on your computer to access
4 additional NY_AST_MOS: record(s) in the EDR Site Report.

**BB314** **APT BLDG** **NY LTANKS** **S102155454**
**ESE** **15 RADFORD STREET** **NY Spills** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.424 mi.**
**2237 ft.** **Site 1 of 2 in cluster BB**

**Relative:**
**Higher**

**Actual:**
**82 ft.**

LTANKS:

| | |
|---|---|
| Name: | APT BLDG |
| Address: | 15 RADFORD STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0812751 / 2009-04-14 |
| Facility ID: | 0812751 |
| Site ID: | 410387 |
| Spill Date: | 2009-02-23 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2009-02-23 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2009-02-23 |
| Spill Record Last Update: | 2009-04-14 |
| Spiller Name: | JIM |
| Spiller Company: | RADFORD REALTY CORP |
| Spiller Address: | 15 RADFORD ST |
| Spiller County: | 999 |
| Spiller Contact: | JOHN LUNDQUIST |
| Spiller Phone: | (800) 440-8265 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 172839 |
| Latitude: | 40.9171478 |
| Longitude: | -73.8925422 |
| DEC Memo: | 021/23/09: No answers at either Callers or RP...ra. 04/14/09 W. Schneider ttf 2/23/09, replaced vent whistle and passed retest. NFA TG<br>Not reported |
| Remarks: | TANK TEST FAILURE ON A 2000 GALLON VAULTED TANK. UNK IF ANY PRODUCT WAS SPILLED. |

All Materials:

| | |
|---|---|
| Site ID: | 410387 |
| Operable Unit ID: | 1166875 |
| Operable Unit: | 01 |
| Material ID: | 2158381 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |

**APT BLDG (Continued)** **S102155454**

Recovered: Not reported
Oxygenate: Not reported

SPILLS:
Name: MYSTIC OIL
Address: 15 RADFORD STREET
City,State,Zip: YONKERS, NY
Spill Number/Closed Date: 9501134 / 1995-05-30
Facility ID: 9501134
Facility Type: ER
DER Facility ID: 172839
Site ID: 208311
DEC Region: 3
Spill Cause: Equipment Failure
Spill Class: D4
SWIS: 6018
Spill Date: 1995-04-27
Investigator: tdghiosa
Referred To: Not reported
Reported to Dept: 1995-04-27
CID: Not reported
Water Affected: Not reported
Spill Source: Private Dwelling
Spill Notifier: Responsible Party
Cleanup Ceased: 1995-05-30
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 0
Date Entered In Computer: 2003-12-02
Spill Record Last Update: 2003-12-02
Spiller Name: Not reported
Spiller Company: Not reported
Spiller Address: Not reported
Spiller Company: 999
Contact Name: Not reported
Latitude: 40.9171470
Longitude: -73.8925453
DEC Memo: Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY
Remarks: OUTSIDE ON SIDEWALK GAGE PROBLEM AREA CLEANED UP BY MYSTIC

All Materials:
Site ID: 208311
Operable Unit ID: 1015541
Operable Unit: 01
Material ID: 369753
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: 5.00
Units: G
Recovered: .00
Oxygenate: Not reported

**AZ315** **CASTLE OIL TERM.** **NY LTANKS** **S101341319**
**NW** **ASHBURN & ELM ST** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.425 mi.**
**2244 ft.** **Site 3 of 4 in cluster AZ**

**Relative:** **Lower**
**Actual:** **3 ft.**

LTANKS:

| | |
|---|---|
| Name: | CASTLE OIL TERM. |
| Address: | ASHBURN & ELM ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 8909993 / 1990-03-07 |
| Facility ID: | 8909993 |
| Site ID: | 110068 |
| Spill Date: | 1990-01-18 |
| Spill Cause: | Tank Failure |
| Spill Source: | Non Major Facility > 1,100 gal |
| Spill Class: | Not reported |
| Cleanup Ceased: | 1953-06-18 |
| SWIS: | 6018 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1990-01-18 |
| CID: | Not reported |
| Water Affected: | SAW MILL RIVER |
| Spill Notifier: | Federal Government |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1990-01-19 |
| Spill Record Last Update: | 1992-02-10 |
| Spiller Name: | Not reported |
| Spiller Company: | SAME |
| Spiller Address: | 290 LOCUST AVE. |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 96509 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | FUEL LEAKED FROM TANK INTO RIVER SORBANT AND BOOM IN RIVER CONTRACTOR IN ROUTE TO SCENE WCHD WILL BE ON SCENE AT 15:00 HR. C.G.AT 15:30 HR. OIL CAME OUT OF OIL VENT |

All Materials:

| | |
|---|---|
| Site ID: | 110068 |
| Operable Unit ID: | 937013 |
| Operable Unit: | 01 |
| Material ID: | 443130 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 1000.00 |
| Units: | G |

**CASTLE OIL TERM. (Continued)** **S101341319**

Recovered: .00
Oxygenate: Not reported

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**316**
**ESE**
**1/4-1/2**
**0.427 mi.**
**2257 ft.**

**APT BUILDING UST**
**16 CORNELL AVE**
**YONKERS, NY**

**NY LTANKS** **S113493827**
**NY Spills** **N/A**

**Relative:**
**Higher**

**Actual:**
**86 ft.**

LTANKS:

| | |
|---|---|
| Name: | APT BUILDING UST |
| Address: | 16 CORNELL AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1215623 / 2014-03-05 |
| Facility ID: | 1215623 |
| Site ID: | 478948 |
| Spill Date: | 2013-02-11 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2013-02-15 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | 2013-05-17 |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2013-02-15 |
| Spill Record Last Update: | 2014-03-05 |
| Spiller Name: | ERIK DEITZ |
| Spiller Company: | APT BUILDING |
| Spiller Address: | 16 CORNELL AVE |
| Spiller County: | 999 |
| Spiller Contact: | ERIK DEITZ |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 434223 |
| Latitude: | 40.9183617 |
| Longitude: | -73.8920486 |
| DEC Memo: | 2-15-13: V.Mc. call to Erik/WC Tank: Working for poss. buyer, no info on owner/building/site. To EIR. 5/15/13: UST removed by Northeast Environmental. Tank had to be excavated by hand, limited work area with no access for a machine. Tank is leaking, contaminated soil evident. Northeast reported a second Spill of 1301308. Northeast is requesting a DEC inspection due to the limited access. jod 3/5/2014: Tank Closure Report from Northeast Environmental reviewed and entered into Edocs. Based upon information provided, no further action required at this time. jod |
| Remarks: | 1000 gal ust |

**APT BUILDING UST (Continued)** **S113493827**

All TTF:

| | |
|---|---|
| Facility ID: | 1215623 |
| Spill Number: | 1215623 |
| Spill Tank Test: | 2493431 |
| Site ID: | 478948 |
| Tank Number: | 1 |
| Tank Size: | 1000 |
| Material: | 0001 |
| EPA UST: | False |
| UST: | True |
| Cause: | 03 |
| Source: | 01 |
| Test Method: | 21 |
| Test Method 2: | Horner EZY3/EZY3 Locator Plus |
| Leak Rate: | .07 |
| Gross Fail: | Not reported |
| Modified By: | jbodee |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 478948 |
| Operable Unit ID: | 1228694 |
| Operable Unit: | 01 |
| Material ID: | 2226373 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | GOLOGURSKY RESIDENCE |
| Address: | 16 CORNELL AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1301308 / 2014-03-05 |
| Facility ID: | 1301308 |
| Facility Type: | ER |
| DER Facility ID: | 434223 |
| Site ID: | 481687 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2013-05-08 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2013-05-08 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Private Dwelling |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |

**APT BUILDING UST (Continued)** **S113493827**

| | |
|---|---|
| Cleanup Meets Std: | True |
| Last Inspection: | 2013-05-17 |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2013-05-08 |
| Spill Record Last Update: | 2014-03-05 |
| Spiller Name: | VAL GOLOGURSKY |
| Spiller Company: | VAL GOLOGURSKY |
| Spiller Address: | 16 CORNELL AVE |
| Spiller Company: | 999 |
| Contact Name: | VAL GOLOGURSKY |
| Latitude: | 40.9183617 |
| Longitude: | -73.8920486 |
| DEC Memo: | 5-8-13: V.Mc. call to Mr.Gologursky: Purchessed house in 2005, unk. age of UST. Ins. Comp. notified, desission on coverage pending. Provided contact info for J.O'Dee, for follow up as needed. 5/13/13: Previously reported as tightness test failure Spill 1215623. Northeast reports that this is a hand removal, a very limited work area with no machine access. Northeast requests a site inspection by DEC. jod 5/17/13: I met on site with Dwayne Monaco from Northeast Environmental. We went over the site conditions for this UST removal. There is extremely limited access. jod 3/5/2014: Tank Closure Report from Northeast Environmental reviewed and entered into Edocs. Based upon information provided, no further action required at this time. jod |
| Remarks: | cleanup pending |

All Materials:

| | |
|---|---|
| Site ID: | 481687 |
| Operable Unit ID: | 1231449 |
| Operable Unit: | 01 |
| Material ID: | 2230202 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**BA317** **MR RICHARD MOORE** **NY LTANKS** **S102960187**
**NE** **3 UNDERCLIFF ST** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.430 mi.**
**2270 ft.** **Site 2 of 2 in cluster BA**

**Relative:** **Higher**

**Actual:** **112 ft.**

LTANKS:

| | |
|---|---|
| Name: | MR RICHARD MOORE |
| Address: | 3 UNDERCLIFF ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9709212 / 1997-11-17 |

**MR RICHARD MOORE (Continued)** **S102960187**

| | |
|---|---|
| Facility ID: | 9709212 |
| Site ID: | 70956 |
| Spill Date: | 1997-11-05 |
| Spill Cause: | Tank Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1997-11-06 |
| CID: | 323 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1997-11-06 |
| Spill Record Last Update: | 1998-03-12 |
| Spiller Name: | RICHARD MOORE |
| Spiller Company: | MR RICHARD MOORE |
| Spiller Address: | 3 UNDERCLIFF ST |
| Spiller County: | 001 |
| Spiller Contact: | RICHARD MOORE |
| Spiller Phone: | (914) 963-9409 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 67251 |
| Latitude: | 40.9250396 |
| Longitude: | -73.8945751 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY 11/12/97 NEW TANK ON SITE BUT NOT INSTALLED; CONTAMINATED SOIL STAGED NEXT TO EXCAVATION MAY BE RECONTAMINATING EXCAVATION; 11/13/97 NEW TANK INSTALLED; BACKFILLING HAS BEGUN; PIPING NOT FINISHED; CONTAMINATED SOIL STAGED PROPERLY; |
| Remarks: | OLD TANK LEAKING, OUTSIDE 550. TANK BEING REPLACED. |

All Materials:

| | |
|---|---|
| Site ID: | 70956 |
| Operable Unit ID: | 1055605 |
| Operable Unit: | 01 |
| Material ID: | 331131 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

**AZ318** **YONKERS WASTE WATER PLANT** **NY LTANKS** **S104191463**
**NW** **1 FERNBROOK ST** **NY CBS** **N/A**
**1/4-1/2** **YONKERS, NY 10701** **NY AST**
**0.431 mi.** **NY Spills**
**2275 ft.** **Site 4 of 4 in cluster AZ**

**Relative:** **Lower**
**Actual:** **2 ft.**

LTANKS:

| | |
|---|---|
| Name: | COUNTY TREATMENT PLANT - TTF |
| Address: | 1 FERNBROOK STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1902502 / 2022-10-26 |
| Facility ID: | 1902502 |
| Site ID: | 590427 |
| Spill Date: | 2019-06-10 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | BAGRANDA |
| Referred To: | Not reported |
| Reported to Dept: | 2019-06-10 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2019-06-10 |
| Spill Record Last Update: | 2022-10-26 |
| Spiller Name: | Not reported |
| Spiller Company: | Westchester County DEF |
| Spiller Address: | 1 Fernbrook STREET |
| Spiller County: | 999 |
| Spiller Contact: | LEW MACBRIEN |
| Spiller Phone: | (914) 227-5350 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 540227 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 6/10/19: PBS 3-018872, interstitial failure of tank #15 which is a 6k gallon diesel UST. American is contacting Westchester DEF for investigation and retest. jod 10/24/22 Reassigned to BAG. Work done under Spill# 1811613. BAG 10/26/22 No impact assessed. Spill closed. NFA BAG |
| Remarks: | no spill test failure |

All Materials:

| | |
|---|---|
| Site ID: | 590427 |
| Operable Unit ID: | 1338064 |
| Operable Unit: | 01 |
| Material ID: | 2347515 |
| Material Code: | 0008 |
| Material Name: | diesel |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

Units: Not reported
Recovered: Not reported
Oxygenate: Not reported

CBS:
Name: YONKERS JOINT WASTEWATER TREATMENT PLANT
Address: 1 FERNBROOK ST
City,State,Zip: YONKERS, NY 10705
CBS Number: 3-000143
Program Type: CBS
Facility Status: Active
Expiration Date: 07/10/2027
Dec Region: 3
UTMX: 592083.11424
UTMY: 4530978.81280

WESTCHESTER CO. AST:
Name: YONKERS JOINT WASTE WATER TREATMENT PLANT
Address: 1 FERNBROOK STREET
City,State,Zip: YONKERS, NY 10705-0262
PBS Number: 3-018872
Site Status: Active
GDS Number: Not reported
Operator Name: Westchester County DEF
Owner Name: Westchester County DEF
Owner Street: 270 North Ave
Owner Address2: 6th Floor
Owner City/State/Zip: New Rochelle, NY 10801

Tank Number: 01
Status: 3. Closed - Removed
Date Installation: 06/01/1978
Capacity: 150
Product Stored: 0008. Diesel
Product Stored Percent: Not reported
Date Perm Closure: 08/01/2013
Tank Location: 6. Aboveground in subterranean vault with access for inspections
Tank Type: 1. Steel/Carbon steel/Iron
Tank Internal Protection: 0. None
Tank External Protection: 0. None
Tank Leak Detection: 0. None
Tank Secondary Containment: 0. None
Piping Location: 1. Aboveground
Piping Type: 1. Steel/Carbon/ Steel/Iron
Piping External Protection: 0. None
Piping Leak Detection: 0. None
Piping Secondary Containment: 0. None
Overfill Prevention: 0. None
Spill Prevention: 1. Catch Basin
Dispenser: 2. Suction

Tank Number: 18
Status: 3. Closed - Removed
Date Installation: 06/01/1978

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

| | |
|---|---|
| Capacity: | 500 |
| Product Stored: | 0022. Waste/Used Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 12/01/2012 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 6. Fiberglass reinforced plastic (FRP) |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 4. Fiberglass |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 1. Diking (aboveground only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 1. Painted/Asphalt Coating |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 3. Gravity |

| | |
|---|---|
| Tank Number: | 19 |
| Status: | 1. In-Service |
| Date Installation: | 06/01/1978 |
| Capacity: | 500 |
| Product Stored: | 0022. Waste/Used Oil |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 6. Fiberglass reinforced plastic (FRP) |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 4. Fiberglass |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 1. Diking (aboveground only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ steel/iron |
| Piping External Protection: | 1. Painted/Asphalt Coating |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 0. None |
| Spill Prevention: | 0. None |
| Dispenser: | 3. Gravity |

| | |
|---|---|
| Tank Number: | 20 |
| Status: | 1. In-Service |
| Date Installation: | 02/09/2015 |
| Capacity: | 275 |
| Product Stored: | 0008. Diesel |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 1. Electronic Interstitial Monitoring |
| Tank Secondary Containment: | 9. Modified double-walled (aboveground only) |
| Piping Location: | 1. Aboveground |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

| | |
|---|---|
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 1. Painted/Asphalt Coating |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 2. High Level Alarm,4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | 0. None |
| Dispenser: | 1. Submersible |

| | |
|---|---|
| Tank Number: | 21 |
| Status: | 1. In-Service |
| Date Installation: | 01/01/1999 |
| Capacity: | 150 |
| Product Stored: | 0008. Diesel |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 3. Aboveground on saddles,legs,stilts,racks or cradle |
| Tank Type: | 1. Steel/Carbon steel/Iron |
| Tank Internal Protection: | Not reported |
| Tank External Protection: | 1. Painted/Asphalt Coating |
| Tank Leak Detection: | 0. None |
| Tank Secondary Containment: | 1. Diking (aboveground only),9. Modified double-walled (aboveground only) |
| Piping Location: | 1. Aboveground |
| Piping Type: | 1. Steel/Carbon/ Steel/Iron |
| Piping External Protection: | 1. Painted/Asphalt Coating |
| Piping Leak Detection: | 0. None |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 4. Product Level Gauge (Aboveground Only) |
| Spill Prevention: | 2. Transfer Station Containment |
| Dispenser: | 2. Suction |

| | |
|---|---|
| Tank Number: | 6 |
| Status: | 1. In-Service |
| Date Installation: | 12/01/1993 |
| Capacity: | 6000 |
| Product Stored: | 0008. Diesel |
| Product Stored Percent: | Not reported |
| Date Perm Closure: | 01/01/1900 |
| Tank Location: | 6. Aboveground in subterranean vault with access for inspections |
| Tank Type: | 4. Fiberglass coated steel |
| Tank Internal Protection: | 0. None |
| Tank External Protection: | 99. Other |
| Tank Leak Detection: | 1. Electronic Interstitial Monitoring,99. Other |
| Tank Secondary Containment: | 3. Vault (w/ no access) |
| Piping Location: | 2. Underground/on Ground |
| Piping Type: | 10. Copper |
| Piping External Protection: | 99. Other |
| Piping Leak Detection: | 1. Electronic Interstitial Monitoring |
| Piping Secondary Containment: | 0. None |
| Overfill Prevention: | 2. High Level Alarm |
| Spill Prevention: | 1. Catch Basin |
| Dispenser: | 2. Suction |

SPILLS:

| | |
|---|---|
| Name: | YONKERS WASTEWATER TREATMENT PLANT |
| Address: | 1 FERNBROOK ST |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

| | |
|---|---|
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1004680 / 2010-07-26 |
| Facility ID: | 1004680 |
| Facility Type: | ER |
| DER Facility ID: | 85230 |
| Site ID: | 437960 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | C6 |
| SWIS: | 6018 |
| Spill Date: | 2010-07-25 |
| Investigator: | jbodee |
| Referred To: | DIV OF WATER |
| Reported to Dept: | 2010-07-25 |
| CID: | Not reported |
| Water Affected: | HUDSON RIVER |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2010-07-25 |
| Spill Record Last Update: | 2010-07-28 |
| Spiller Name: | Not reported |
| Spiller Company: | YONKERS WASTEWATER TREATMENT PLANT |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | JAJBISH MYSTERY |
| Latitude: | 40.9247369 |
| Longitude: | -73.9063469 |
| DEC Memo: | 7/26/10: Seawge spill at treatment plant, due to heavy rains. Sewage overflowed an embankment and |
| | went to Hudson River. Division of Water will handle. jod |
| Remarks: | down storm drain to river - |

All Materials:

| | |
|---|---|
| Site ID: | 437960 |
| Operable Unit ID: | 1188622 |
| Operable Unit: | 01 |
| Material ID: | 2183558 |
| Material Code: | 0062A |
| Material Name: | raw sewage |
| Case No.: | Not reported |
| Material FA: | Other |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | YONKERS WASTE WATER PLANT |
| Address: | 1 FERNBROOK ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0410611 / 2004-12-31 |
| Facility ID: | 0410611 |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

| | |
|---|---|
| Facility Type: | ER |
| DER Facility ID: | 85230 |
| Site ID: | 335628 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | E5 |
| SWIS: | 6018 |
| Spill Date: | 2004-12-25 |
| Investigator: | JBODee |
| Referred To: | WATER |
| Reported to Dept: | 2004-12-25 |
| CID: | 27 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2004-12-25 |
| Spill Record Last Update: | 2004-12-31 |
| Spiller Name: | Not reported |
| Spiller Company: | YONKERS WASTE WATER PLANT |
| Spiller Address: | 1 FERNBROOK ST |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | 40.9247400 |
| Longitude: | -73.9063350 |
| DEC Memo: | 12/31/04 FORWARDED TO WESTCHESTER COUNTY HEALTH DEPT, BUREAU OF ENVIRONMENTAL QUALITY AND DEC DIV OF WATER. jbo |
| Remarks: | Unnkwon how much exactly spilled. Per caller less than 1000 gallons. Caller reports a safety plug failed. Spill went into the storm drain. Drain does go to the Hudson River. It is unknown if any actually got into the river. Caller is from Westchester Dept of Enviromental Facilities. |

All Materials:

| | |
|---|---|
| Site ID: | 335628 |
| Operable Unit ID: | 1097690 |
| Operable Unit: | 01 |
| Material ID: | 577717 |
| Material Code: | 0058A |
| Material Name: | sludge |
| Case No.: | Not reported |
| Material FA: | Other |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | YONKERS WASTE WATER PLANT |
| Address: | 1 FERNBROOK ST |
| City,State,Zip: | YONKERS, NY 10701 |
| Spill Number/Closed Date: | 1811613 / 2022-10-26 |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

| | |
|---|---|
| Facility ID: | 1811613 |
| Facility Type: | ER |
| DER Facility ID: | 535039 |
| Site ID: | 582561 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2019-02-21 |
| Investigator: | BAGRANDA |
| Referred To: | Not reported |
| Reported to Dept: | 2019-02-21 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Gasoline Station or other PBS Facility |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2019-02-21 |
| Spill Record Last Update: | 2022-10-26 |
| Spiller Name: | George Wong |
| Spiller Company: | WESTCHESTER CO. Dept. Env. Facilities |
| Spiller Address: | 1 FERNBOOK ST |
| Spiller Company: | 001 |
| Contact Name: | PATRICK DUNN |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 2/21/19 American Petroleum was called to pump out the interstitial space of tank 15 (6,000 gallon diesel). Space filled up with water again. American would pump it out, water would fill it. Water only, no product, no release to environment. American Petroleum believes the problem is the riser pipe. They plan to uncover riser pipe, attempt repairs, and retest. If fails test, tank to be removed and replaced. No waterways on property, but facility is waste water treatment plant on Hudson River. Plant is on municipal water. WCHD on route to site. GA 10/24/22 Received TCR and FIR from JC. Spill 1902502 assigned to BAG, work performed under this one. Reviewed TCR & FIR. BAG 10/26/22 No impact assessed. Spill closed. NFA BAG |
| Remarks: | alarm in Interstitial in tank # 15 diesel |

All Materials:

| | |
|---|---|
| Site ID: | 582561 |
| Operable Unit ID: | 1330242 |
| Operable Unit: | 01 |
| Material ID: | 2339420 |
| Material Code: | 0008 |
| Material Name: | diesel |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

| | |
|---|---|
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | CONSTRUCTION SITE |
| Address: | 1 FERNBROOK ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1902084 / 2019-09-11 |
| Facility ID: | 1902084 |
| Facility Type: | ER |
| DER Facility ID: | 85230 |
| Site ID: | 588993 |
| DEC Region: | 3 |
| Spill Cause: | Unknown |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 2019-05-29 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2019-05-29 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2019-05-29 |
| Spill Record Last Update: | 2019-09-11 |
| Spiller Name: | Not reported |
| Spiller Company: | WASTE WATER TREATMENT PLANT |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | MIKE CHICOINE |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 5/29/19 Left message for notifier to call duty desk. ga 5/29/19 Caller was digging trench for gas line across access road for Yonkers Joint Waste Water Treatment Plant and came across section of soil that smelled highly of petroleum. Soil was oily and black. Soil sample for analysis to be taken tomorrow. Trench is in middle of paved road, 'contaminated' area is 3 ft deep, 2 ft wide, and 75 ft long. Access road will be closed until soil testing results come back. Area is 250 ft from Hudson River - WWTP is on the river bank. ga 05/30/19 William Eilbacher from the WCHD emailedI spoke with Kyle Kennedy (516-492-9196) who is the engineer from CDM at the facility, and he said that the contractor that was digging the trench in the driveway of the Yonkers WWTP (PBS #3-018872) found petroleum contaminated soil while digging. The contractor placed |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

| | |
|---|---|
| Remarks: | the contaminated soil on plastic sheeting. Sound Environmental will be taking soil samples of the contaminated soil to characterize the waste and determine how to dispose of it. Chris Lalak from the WCHD responded to William Eilbacher, They also need to investigate and remediate the spill. I understand it may be historic contamination and/or it may be from an off-site source, which may affect the project. TG 07/29/19 Carlos Torres reported that soil sample were collected and analyzed and the results were below DEC soil guidance values in CP-51. NFA TG company digging on site and believe they found soil with unknown petroleum |

All Materials:

| | |
|---|---|
| Site ID: | 588993 |
| Operable Unit ID: | 1336641 |
| Operable Unit: | 01 |
| Material ID: | 2346052 |
| Material Code: | 0066A |
| Material Name: | unknown petroleum |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | YONKERS WASTEWATER TREATM |
| Address: | 1 FERNBROOK ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0600883 / 2006-04-24 |
| Facility ID: | 0600883 |
| Facility Type: | ER |
| DER Facility ID: | 85230 |
| Site ID: | 362989 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | E5 |
| SWIS: | 6018 |
| Spill Date: | 2006-04-23 |
| Investigator: | JBODee |
| Referred To: | Not reported |
| Reported to Dept: | 2006-04-23 |
| CID: | 74 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2006-04-23 |
| Spill Record Last Update: | 2006-04-26 |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

| | |
|---|---|
| Spiller Name: | Not reported |
| Spiller Company: | YONKERS WASTEWATER TREATM |
| Spiller Address: | 1 FERNBROOK ST |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | 40.9247400 |
| Longitude: | -73.9063350 |
| DEC Memo: | 04/26/06: 2 tank system contained - some may have entered storm drain - vac truck to pump out. Forwarded to Division of water. |
| Remarks: | CO WESTCHESTER YONKERS WASTEWATER TREATMENT PLANT PRIMARY DIGESTER #2 - DUE TO A CLOGGED OVERFLOW TUBE (10,000 GALLONS) SPILL IS CONTAINED |
| Name: | WWTP - ANONYMOUS COMPLAINT |
| Address: | 1 FERNBROOK STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 2307594 / 2023-12-18 |
| Facility ID: | 2307594 |
| Facility Type: | ER |
| DER Facility ID: | 540227 |
| Site ID: | 659672 |
| DEC Region: | 3 |
| Spill Cause: | Unknown |
| Spill Class: | D6 |
| SWIS: | 6018 |
| Spill Date: | 2023-12-15 |
| Investigator: | DECDOW |
| Referred To: | WATER |
| Reported to Dept: | 2023-12-15 |
| CID: | Not reported |
| Water Affected: | HUDSON RIVER |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2023-12-15 |
| Spill Record Last Update: | 2023-12-18 |
| Spiller Name: | Not reported |
| Spiller Company: | Yonkers Joint WWTP |
| Spiller Address: | Not reported |
| Spiller Company: | 001 |
| Contact Name: | ANON |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 11/15/23 Unable to obtain any additional information due to anonymous nature of the complaint. Report referred to DOW. JG 11/18/2023: Meena George reports DOW is following up. NFA jod |
| Remarks: | anon caller reported that at the waste treatment plant, there was a power failure at appx 11 pm til 6am and no emergency staff were notified of the event. due to the loss of power there was no aeration process in treating the waste and there was potential for untreated waste to be released into the Hudson River. |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

All Materials:

| | |
|---|---|
| Site ID: | 659672 |
| Operable Unit ID: | 1406493 |
| Operable Unit: | 01 |
| Material ID: | 2423936 |
| Material Code: | 0062A |
| Material Name: | raw sewage |
| Case No.: | Not reported |
| Material FA: | Other |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | SPILL NUMBER 0011547 |
| Address: | 1 FERNBROOK ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0011547 / 2001-04-27 |
| Facility ID: | 0011547 |
| Facility Type: | ER |
| DER Facility ID: | 85230 |
| Site ID: | 95282 |
| DEC Region: | 3 |
| Spill Cause: | Unknown |
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 2001-01-25 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 2001-01-25 |
| CID: | 205 |
| Water Affected: | Not reported |
| Spill Source: | Unknown |
| Spill Notifier: | Affected Persons |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2001-01-25 |
| Spill Record Last Update: | 2002-04-30 |
| Spiller Name: | JOHN TUCKER |
| Spiller Company: | LCOR, INC. |
| Spiller Address: | 777 OLD SAW MILL RIVER RD |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | 40.9247400 |
| Longitude: | -73.9063350 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY 01/25/2001 NOTIFIED B. MCDONALD (WCDOH); WCDOH TO RESPOND. SEE ALSO SPILL NUMBER 0013148 03/11/2002 CONSENT ORDER SIGNED BY EASTVIEW HOLDING, LLC. SPILL NUMBER PREVIOUSLY CLOSED 4/27/01. |
| Remarks: | oil in influent. unk origin. |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

All Materials:

| | |
|---|---|
| Site ID: | 95282 |
| Operable Unit ID: | 833026 |
| Operable Unit: | 01 |
| Material ID: | 563242 |
| Material Code: | 0066A |
| Material Name: | unknown petroleum |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | YONKERS WASTE WATER |
| Address: | 1 FERNBROOK ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0209187 / 2002-12-10 |
| Facility ID: | 0209187 |
| Facility Type: | ER |
| DER Facility ID: | 85230 |
| Site ID: | 95283 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 2002-12-05 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2002-12-06 |
| CID: | 398 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Local Agency |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2002-12-06 |
| Spill Record Last Update: | 2002-12-11 |
| Spiller Name: | JOE GENNARELLI |
| Spiller Company: | YONKERS WASTE WATER |
| Spiller Address: | 1 FERNBROOK ST |
| Spiller Company: | 001 |
| Contact Name: | JOE GENNARELLI |
| Latitude: | 40.9247400 |
| Longitude: | -73.9063350 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'DEE |
| Remarks: | FROZEN CHEMICAL LINE. REPAIRS ARE BEING MADE AT THIS TIME. NO CALL BACK NEEDED. |

All Materials:

| | |
|---|---|
| Site ID: | 95283 |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

| | |
|---|---|
| Operable Unit ID: | 862355 |
| Operable Unit: | 01 |
| Material ID: | 516165 |
| Material Code: | 0027A |
| Material Name: | chlorine |
| Case No.: | 07782505 |
| Material FA: | Hazardous Material |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | SEWAGE TREATMENT PLANT |
| Address: | 1 FERNBROOK ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9904465 / 1999-07-15 |
| Facility ID: | 9904465 |
| Facility Type: | ER |
| DER Facility ID: | 85230 |
| Site ID: | 95284 |
| DEC Region: | 3 |
| Spill Cause: | Unknown |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 1999-07-15 |
| Investigator: | BONDS |
| Referred To: | Not reported |
| Reported to Dept: | 1999-07-15 |
| CID: | 257 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1999-07-15 |
| Spill Record Last Update: | 2019-06-07 |
| Spiller Name: | Not reported |
| Spiller Company: | SEWAGE TREATMENT PLANT |
| Spiller Address: | 1 FERNBROOK ST |
| Spiller Company: | 001 |
| Contact Name: | TOM LAURO |
| Latitude: | 40.9247400 |
| Longitude: | -73.9063350 |
| DEC Memo: | Not reported |
| Remarks: | DOING TESTING AND OVERFILLED TANK |

All Materials:

| | |
|---|---|
| Site ID: | 95284 |
| Operable Unit ID: | 1083294 |
| Operable Unit: | 01 |
| Material ID: | 304345 |
| Material Code: | 0062A |
| Material Name: | raw sewage |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

| | |
|---|---|
| Case No.: | Not reported |
| Material FA: | Other |
| Quantity: | 400.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | YONKERS WASTE WATER FACIL |
| Address: | 1 FERNBROOK ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9906758 / 1999-09-07 |
| Facility ID: | 9906758 |
| Facility Type: | ER |
| DER Facility ID: | 85230 |
| Site ID: | 95285 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 1999-09-07 |
| Investigator: | jghardy |
| Referred To: | Not reported |
| Reported to Dept: | 1999-09-07 |
| CID: | 312 |
| Water Affected: | Not reported |
| Spill Source: | Unknown |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1999-09-07 |
| Spill Record Last Update: | 1999-09-09 |
| Spiller Name: | MIKE PISANI |
| Spiller Company: | DP WOLFF, INC |
| Spiller Address: | 50 BROADWAY |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | 40.9247400 |
| Longitude: | -73.9063350 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was HARDY 9/07/99 TRI-STATE<br>RESPONDED -- NOTHING FOUND IN STORM DRAIN. NFA |
| Remarks: | HOSE CAME OUT OF THE DRUM - BEING CLEANED UP NOW |

All Materials:

| | |
|---|---|
| Site ID: | 95285 |
| Operable Unit ID: | 1085191 |
| Operable Unit: | 01 |
| Material ID: | 299482 |
| Material Code: | 0028A |
| Material Name: | ethylene glycol |
| Case No.: | 00107211 |
| Material FA: | Hazardous Material |
| Quantity: | 1.00 |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

| | |
|---|---|
| Units: | G |
| Recovered: | 1.00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | YONKERS WASTEWATER PLANT |
| Address: | 1 FERNBROOK ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9909175 / 1999-10-28 |
| Facility ID: | 9909175 |
| Facility Type: | ER |
| DER Facility ID: | 85230 |
| Site ID: | 95286 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | B4 |
| SWIS: | 6018 |
| Spill Date: | 1999-10-28 |
| Investigator: | DXWEITZ |
| Referred To: | Not reported |
| Reported to Dept: | 1999-10-28 |
| CID: | 390 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1999-10-28 |
| Spill Record Last Update: | 1999-11-04 |
| Spiller Name: | TOM LAURO |
| Spiller Company: | YONKERS WASTEWATER PLANT |
| Spiller Address: | 1 FERNBROOK ST |
| Spiller Company: | 001 |
| Contact Name: | TOM LAURO |
| Latitude: | 40.9247400 |
| Longitude: | -73.9063350 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was WEITZ 10/28/99 SPILL IN CONTAINMENT AREA AND HAS ALREADY BEEN CLEANED UP. NFA |
| Remarks: | gas build up caused drain valve to fail releasing product |

All Materials:

| | |
|---|---|
| Site ID: | 95286 |
| Operable Unit ID: | 1087861 |
| Operable Unit: | 01 |
| Material ID: | 298264 |
| Material Code: | 0124A |
| Material Name: | sodium hypochlorite |
| Case No.: | 07681529 |
| Material FA: | Hazardous Material |
| Quantity: | 900.00 |
| Units: | G |
| Recovered: | 900.00 |
| Oxygenate: | Not reported |

**YONKERS WASTE WATER PLANT (Continued)** **S104191463**

Click this hyperlink while viewing on your computer to access
5 additional NY SPILL: record(s) in the EDR Site Report.

**BB319** **ST DENNIS CHURCH** **NY LTANKS** **S106718936**
**ESE** **470 VAN CORTLAND PARK AVE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.434 mi.**
**2294 ft.** **Site 2 of 2 in cluster BB**

**Relative:**
**Higher**

**Actual:**
**82 ft.**

LTANKS:

| | |
|---|---|
| Name: | ST DENNIS CHURCH |
| Address: | 470 VAN CORTLAND PARK AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0206989 / 2003-02-04 |
| Facility ID: | 0206989 |
| Site ID: | 120157 |
| Spill Date: | 2002-10-04 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | WCHD |
| Referred To: | Westchester Cnty Health Dept |
| Reported to Dept: | 2002-10-07 |
| CID: | 270 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2002-10-07 |
| Spill Record Last Update: | 2003-03-26 |
| Spiller Name: | FR EDWARD O'HALLORAN |
| Spiller Company: | ST DENNIS CHURCH |
| Spiller Address: | 470 VAN CORTLAND PARK AV |
| Spiller County: | 001 |
| Spiller Contact: | FR EDWARD O'HALLORAN |
| Spiller Phone: | (914) 963-8468 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 104343 |
| Latitude: | 40.9167977 |
| Longitude: | -73.8927530 |
| DEC Memo: | Not reported |
| Remarks: | no comments |

All TTF:

| | |
|---|---|
| Facility ID: | 0206989 |
| Spill Number: | 0206989 |
| Spill Tank Test: | 1527541 |
| Site ID: | 120157 |
| Tank Number: | 2 |
| Tank Size: | 1500 |
| Material: | 0001 |
| EPA UST: | Not reported |

**ST DENNIS CHURCH (Continued)** **S106718936**

| | |
|---|---|
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 120157 |
| Operable Unit ID: | 858736 |
| Operable Unit: | 01 |
| Material ID: | 517579 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**320**
**ENE**
**1/4-1/2**
**0.440 mi.**
**2323 ft.**

**RESIDENTIAL - TTF** **NY LTANKS** **S111836488**
**106 UNDERCLIFF ST** **N/A**
**YONKERS, NY**

**Relative:**
**Higher**

**Actual:**
**255 ft.**

LTANKS:

| | |
|---|---|
| Name: | RESIDENTIAL - TTF |
| Address: | 106 UNDERCLIFF ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1200369 / 2013-02-08 |
| Facility ID: | 1200369 |
| Site ID: | 462996 |
| Spill Date: | 2012-04-12 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2012-04-13 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2012-04-13 |
| Spill Record Last Update: | 2025-01-22 |

**RESIDENTIAL - TTF (Continued)** **S111836488**

| | |
|---|---|
| Spiller Name: | Not reported |
| Spiller Company: | PROPERTY OWNER |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | GEORGIA |
| Spiller Phone: | (800) 440-8265 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 417420 |
| Latitude: | 40.9225466 |
| Longitude: | -73.8927455 |
| DEC Memo: | 4/13/12 - Left a message for a call back. KAB 9/28/12: I received a call from a Kelsey Martinez. She states she is a potential buyer of this Bank owned property. She had been informed the tank had failed a test, but the seller stated they were not going to address that and the property was for sale as is . She has many questions about DEC reporting requirements and regulations which I answered. She states she will attempt to contact the testing company ATS and get more information. jod 2/8/13: LUST and contaminated soil removed. Tank closure report from Advanced Environmental entered into eDocs. Based upon the information provided, no further action is required at this time. jod |
| Remarks: | unknown - house in real estate transaction - cleanup pending - |

All Materials:

| | |
|---|---|
| Site ID: | 462996 |
| Operable Unit ID: | 1213098 |
| Operable Unit: | 01 |
| Material ID: | 2211008 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**BC321** **SPILL NUMBER 0209043** **NY LTANKS** **S105997471**
**NE** **99 ALTA AVE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.441 mi.**
**2327 ft.** **Site 1 of 2 in cluster BC**

**Relative:** **Higher**
**Actual:** **266 ft.**

LTANKS:

| | |
|---|---|
| Name: | SPILL NUMBER 0209043 |
| Address: | 99 ALTA AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0209043 / 2004-07-06 |
| Facility ID: | 0209043 |
| Site ID: | 282162 |
| Spill Date: | 2002-12-03 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |

**SPILL NUMBER 0209043 (Continued)** **S105997471**

| | |
|---|---|
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2002-12-03 |
| CID: | 281 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2002-12-03 |
| Spill Record Last Update: | 2004-07-06 |
| Spiller Name: | Not reported |
| Spiller Company: | UNKOWN |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | MARC RICCIARDI |
| Spiller Phone: | (800) 440-8265 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 229059 |
| Latitude: | 40.9238107 |
| Longitude: | -73.8932417 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'DEE 07/06/04 ELITE ENVIRONMENTAL DISPOSED OF 11.43 TONS OF CONTAMINATED SOIL. SOME RESIDUAL CONTAMINATION COULD NOT BE EXCAVATED DUE TO STRUCTURAL CONSIDERATIONS. BASED UPON INFORMATION SUBMITTED TO DEC, NO FURTHER ACTION IS REQUIRED. jbo |
| Remarks: | TANK TEST FAILURE AT ABOVE LOCATION. TEST PERFORMED AT REQUEST OF A POTENTIAL BUYER. |

All TTF:

| | |
|---|---|
| Facility ID: | 0209043 |
| Spill Number: | 0209043 |
| Spill Tank Test: | 1527774 |
| Site ID: | 282162 |
| Tank Number: | 1 |
| Tank Size: | 1000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 18 |
| Test Method 2: | Alert Model 1000 plus 1050 (Formerly Gilbarco Precision) |
| Leak Rate: | .00 |
| Gross Fail: | F |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 282162 |
| Operable Unit ID: | 860467 |
| Operable Unit: | 01 |
| Material ID: | 516028 |
| Material Code: | 0001A |

**SPILL NUMBER 0209043 (Continued)** **S105997471**

| | |
|---|---|
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**BD322** **GETTY SQUARE BRANCH TRAIL LOT 1** **US BROWNFIELDS** **1018149749**
**SE** **52 LAWRENCE STREET** **N/A**
**1/4-1/2** **YONKERS, NY 10705**
**0.446 mi.**
**2356 ft.** **Site 1 of 2 in cluster BD**

**Relative:**
**Higher**

**Actual:**
**88 ft.**

US BROWNFIELDS:

| | |
|---|---|
| Name: | Getty Square Branch Trail Lot 1 |
| Address: | 52 Lawrence Street |
| City,State,Zip: | YONKERS, NY 10705 |
| Property ID: | 204581 |
| Property Alias: | Not reported |
| Recipient Name: | Groundwork Hudson Valley |
| Grant Type: | Not reported |
| Property Number: | 1.-36-100 |
| Parcel Size: | 1.18 |
| Latitude: | 40.9162743 |
| Longitude: | -73.8930174 |
| Census Tract: | 36119001305 |
| State or Tribal Voluntary Response Program: | Y |
| Program Name: | TR |
| AA Activity Funded: | Not reported |
| Start Date: | Not reported |
| Redev Completition Date: | Not reported |
| Completed Date: | Not reported |
| Cleanup Funding: | Not reported |
| Cleanup Funding Source: | Not reported |
| Activity Funded: | Not reported |
| Assessment Funding: | Not reported |
| Assessment Funding Source: | Not reported |
| Redevelopment Funding: | Not reported |
| Contaminants REC: | Not reported |
| Contaminants Found at Actionable Level: | Not reported |
| Redev. Funding Source: | Not reported |
| Redev. Funding Entity Name: | Not reported |
| Contaminants Found Below Actionable Level: | Not reported |
| Redevelopment Start Date: | Not reported |
| Assessment Funding Entity: | Not reported |
| Cleanup Funding Entity: | Not reported |
| Climate Adapt Mitig - Planning or Assessment: | Not reported |
| Cooperative Agreement Number: | 96287014 |
| Start Date: | Not reported |
| Ownership Entity: | Government |
| Additional Institutional Controls Information: | Not reported |
| Completion Date: | Not reported |
| Address of Data Sources (URL if available) 1: | Not reported |
| Cleanup Required: | N |
| Indicates Cleanup/Treatment Tech Implemented: | Not reported |
| Institutional Controls Required: | N |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| IC Category Proprietary Controls: | Not reported |
| Excavation and Disposal of Soils: | Not reported |
| Extraction of contaminants: | Not reported |
| IC Cat. Info. Devices: | Not reported |
| Removal of materials (tanks and piping, etc.): | Not reported |
| IC Cat. Gov. Controls: | Not reported |
| Reduction of Contam Bioremediation/Phytoremediation: | Not reported |
| IC Cat. Enforcement Permit Tools: | Not reported |
| Cleanup of structures: | Not reported |
| IC in place date: | Not reported |
| Additional Cleanup/Treatment Tech Info: | Not reported |
| IC in place: | N |
| Address of Data Source (URL if available) 2: | Not reported |
| Indicate whether Engineering Controls are required: | N |
| State/tribal program ID: | Not reported |
| Cover Technologies (e.g., Capping): | Not reported |
| Security (e.g., Guard, Fence): | Not reported |
| Immobilization Process: | Not reported |
| Engineering Barriers (e.g., Slurry Walls, Sheet): | Not reported |
| Other: | Not reported |
| Additional Engineering Controls Information: | Not reported |
| Address of Data Source (URL if available) 3: | Not reported |
| Indicate whether Engineering Controls are in place: | N |
| Date Engineering Controls put into place: | Not reported |
| ACRES Cleaned Up: | Not reported |
| Section 128(a) State/Tribal: | Not reported |
| Multipurpose - Cost Share Amount: | Not reported |
| Cleanup - Cost Share Amount: | Not reported |
| RLF Loan - Total Loan Amount: | Not reported |
| RLF - Loan Signed Date: | Not reported |
| RLF Loan - Anticipated Repayment Start Date: | Not reported |
| RLF Loan - Anticipated Repayment End Date: | Not reported |
| RLF Loan - Interest Rate: | Not reported |
| RLF Loan - EPA Funds Used: | Not reported |
| Contaminant Cleanup: | Not reported |
| RLF Loan - Cost Share Used: | Not reported |
| Media Affected: | Not reported |
| RLF Loan - Program Income Used: | Not reported |
| Media Cleanup: | Not reported |
| RLF Loan - Discounted: | Not reported |
| RLF Loan - Discount Percentage: | Not reported |
| RLF Subgrant - Total Subgrant Amount: | Not reported |
| RLF Subgrant - Signed Date: | Not reported |
| RLF Subgrant - EPA Funds Used: | Not reported |
| RLF Subgrant - Cost Share Used: | Not reported |
| RLF Subgrant - Program Income Used: | Not reported |
| RLF Direct Cleanup - Total Funding Amt: | Not reported |
| Num. of cleanup and re-dev. jobs: | Not reported |
| RLF Direct Cleanup - Source of Funding: | Not reported |
| RLF Leveraged - Funding Source Type: | Not reported |
| Past use greenspace acreage: | Not reported |
| Past use residential acreage: | Not reported |
| RLF Leveraged - Entity Providing Funding: | Not reported |
| RLF Leveraged - Funding Amount: | Not reported |
| Cleanup Completion Doc - NFA Letter Received: | N |
| Past use commercial acreage: | Not reported |
| NFA Letter Date Received: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Past use industrial acreage: | 1.18 |
| Cleanup Comp Doc - Letter/Signed Rep Qualified Pro: | N |
| Future use greenspace acreage: | 1.18 |
| Letter/Signed Report Date Received: | Not reported |
| Future use residential acreage: | Not reported |
| Future use commercial acreage: | Not reported |
| Cleanup Completion Doc- Other forms of Doc: | Not reported |
| Future use industrial acreage: | Not reported |
| Climate Adapt and Mitiga - Demo or Cleanup: | Not reported |
| ReDev Activity Funded: | Not reported |
| Amount of Funding Expended on this Activity 2: | Not reported |
| Number of Redevelopment Jobs Leveraged: | Not reported |
| Climate Adaptation and Mitigation Redevelopment: | Not reported |
| Radius: | 0.5 |
| Below Poverty Number: | 5218 |
| Below Poverty Percent: | 22.44 |
| Meidan Income: | 10086 |
| Meidan Income Number: | 11647 |
| Meidan Income Percent: | 50.09 |
| Vacant Housing Number: | 857 |
| Vacant Housing Percent: | 10.11 |
| Unemployed Number: | 1278 |
| Unemployed Percent: | 5.5 |

| | |
|---|---|
| Name: | Getty Square Branch Trail Lot 1 |
| Address: | 52 Lawrence Street |
| City,State,Zip: | YONKERS, NY 10705 |
| Property ID: | 204581 |
| Property Alias: | Not reported |
| Recipient Name: | R2 TBA - New York (STAG Funded) |
| Grant Type: | Not reported |
| Property Number: | 1.-36-100 |
| Parcel Size: | 1.18 |
| Latitude: | 40.9162743 |
| Longitude: | -73.8930174 |
| Census Tract: | 36119001305 |
| State or Tribal Voluntary Response Program: | Y |
| Program Name: | Not reported |
| AA Activity Funded: | Not reported |
| Start Date: | Not reported |
| Redev Completition Date: | Not reported |
| Completed Date: | Not reported |
| Cleanup Funding: | Not reported |
| Cleanup Funding Source: | Not reported |
| Activity Funded: | Phase II |
| Assessment Funding: | Not reported |
| Assessment Funding Source: | Not reported |
| Redevelopment Funding: | Not reported |
| Contaminants REC: | Not reported |
| Contaminants Found at Actionable Level: | Not reported |
| Redev. Funding Source: | Not reported |
| Redev. Funding Entity Name: | Not reported |
| Contaminants Found Below Actionable Level: | Not reported |
| Redevelopment Start Date: | Not reported |
| Assessment Funding Entity: | Not reported |
| Cleanup Funding Entity: | Not reported |
| Climate Adapt Mitig - Planning or Assessment: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Cooperative Agreement Number: | n/a |
| Start Date: | Not reported |
| Ownership Entity: | Government |
| Additional Institutional Controls Information: | Not reported |
| Completion Date: | Not reported |
| Address of Data Sources (URL if available) 1: | Not reported |
| Cleanup Required: | N |
| Indicates Cleanup/Treatment Tech Implemented: | Not reported |
| Institutional Controls Required: | N |
| IC Category Proprietary Controls: | Not reported |
| Excavation and Disposal of Soils: | Not reported |
| Extraction of contaminants: | Not reported |
| IC Cat. Info. Devices: | Not reported |
| Removal of materials (tanks and piping, etc.): | Not reported |
| IC Cat. Gov. Controls: | Not reported |
| Reduction of Contam Bioremediation/Phytoremediation: | Not reported |
| IC Cat. Enforcement Permit Tools: | Not reported |
| Cleanup of structures: | Not reported |
| IC in place date: | Not reported |
| Additional Cleanup/Treatment Tech Info: | Not reported |
| IC in place: | N |
| Address of Data Source (URL if available) 2: | Not reported |
| Indicate whether Engineering Controls are required: | N |
| State/tribal program ID: | Not reported |
| Cover Technologies (e.g., Capping): | Not reported |
| Security (e.g., Guard, Fence): | Not reported |
| Immobilization Process: | Not reported |
| Engineering Barriers (e.g., Slurry Walls, Sheet): | Not reported |
| Other: | Not reported |
| Additional Engineering Controls Information: | Not reported |
| Address of Data Source (URL if available) 3: | Not reported |
| Indicate whether Engineering Controls are in place: | N |
| Date Engineering Controls put into place: | Not reported |
| ACRES Cleaned Up: | Not reported |
| Section 128(a) State/Tribal: | Not reported |
| Multipurpose - Cost Share Amount: | Not reported |
| Cleanup - Cost Share Amount: | Not reported |
| RLF Loan - Total Loan Amount: | Not reported |
| RLF - Loan Signed Date: | Not reported |
| RLF Loan - Anticipated Repayment Start Date: | Not reported |
| RLF Loan - Anticipated Repayment End Date: | Not reported |
| RLF Loan - Interest Rate: | Not reported |
| RLF Loan - EPA Funds Used: | Not reported |
| Contaminant Cleanup: | Not reported |
| RLF Loan - Cost Share Used: | Not reported |
| Media Affected: | Not reported |
| RLF Loan - Program Income Used: | Not reported |
| Media Cleanup: | Not reported |
| RLF Loan - Discounted: | Not reported |
| RLF Loan - Discount Percentage: | Not reported |
| RLF Subgrant - Total Subgrant Amount: | Not reported |
| RLF Subgrant - Signed Date: | Not reported |
| RLF Subgrant - EPA Funds Used: | Not reported |
| RLF Subgrant - Cost Share Used: | Not reported |
| RLF Subgrant - Program Income Used: | Not reported |
| RLF Direct Cleanup - Total Funding Amt: | Not reported |
| Num. of cleanup and re-dev. jobs: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| RLF Direct Cleanup - Source of Funding: | Not reported |
| RLF Leveraged - Funding Source Type: | Not reported |
| Past use greenspace acreage: | Not reported |
| Past use residential acreage: | Not reported |
| RLF Leveraged - Entity Providing Funding: | Not reported |
| RLF Leveraged - Funding Amount: | Not reported |
| Cleanup Completion Doc - NFA Letter Received: | Not reported |
| Past use commercial acreage: | Not reported |
| NFA Letter Date Received: | Not reported |
| Past use industrial acreage: | 1.18 |
| Cleanup Comp Doc - Letter/Signed Rep Qualified Pro: | Not reported |
| Future use greenspace acreage: | 1.18 |
| Letter/Signed Report Date Received: | Not reported |
| Future use residential acreage: | Not reported |
| Future use commercial acreage: | Not reported |
| Cleanup Completion Doc- Other forms of Doc: | Not reported |
| Future use industrial acreage: | Not reported |
| Climate Adapt and Mitiga - Demo or Cleanup: | Not reported |
| ReDev Activity Funded: | Not reported |
| Amount of Funding Expended on this Activity 2: | Not reported |
| Number of Redevelopment Jobs Leveraged: | Not reported |
| Climate Adaptation and Mitigation Redevelopment: | Not reported |
| Radius: | 0.5 |
| Below Poverty Number: | 5218 |
| Below Poverty Percent: | 22.44 |
| Meidan Income: | 10086 |
| Meidan Income Number: | 11647 |
| Meidan Income Percent: | 50.09 |
| Vacant Housing Number: | 857 |
| Vacant Housing Percent: | 10.11 |
| Unemployed Number: | 1278 |
| Unemployed Percent: | 5.5 |

| | |
|---|---|
| Name: | Getty Square Branch Trail Lot 1 |
| Address: | 52 Lawrence Street |
| City,State,Zip: | YONKERS, NY 10705 |
| Property ID: | 204581 |
| Property Alias: | Not reported |
| Recipient Name: | R2 TBA - New York (STAG Funded) |
| Grant Type: | Not reported |
| Property Number: | 1.-36-100 |
| Parcel Size: | 1.18 |
| Latitude: | 40.9162743 |
| Longitude: | -73.8930174 |
| Census Tract: | 36119001305 |
| State or Tribal Voluntary Response Program: | Y |
| Program Name: | Not reported |
| AA Activity Funded: | Not reported |
| Start Date: | Not reported |
| Redev Completition Date: | Not reported |
| Completed Date: | Not reported |
| Cleanup Funding: | Not reported |
| Cleanup Funding Source: | Not reported |
| Activity Funded: | Not reported |
| Assessment Funding: | Not reported |
| Assessment Funding Source: | Not reported |
| Redevelopment Funding: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Contaminants REC: | Not reported |
| Contaminants Found at Actionable Level: | Not reported |
| Redev. Funding Source: | Not reported |
| Redev. Funding Entity Name: | Not reported |
| Contaminants Found Below Actionable Level: | Not reported |
| Redevelopment Start Date: | Not reported |
| Assessment Funding Entity: | EPA |
| Cleanup Funding Entity: | Not reported |
| Climate Adapt Mitig - Planning or Assessment: | Not reported |
| Cooperative Agreement Number: | n/a |
| Start Date: | 6/7/2015 |
| Ownership Entity: | Government |
| Additional Institutional Controls Information: | Not reported |
| Completion Date: | 9/17/2015 |
| Address of Data Sources (URL if available) 1: | Not reported |
| Cleanup Required: | N |
| Indicates Cleanup/Treatment Tech Implemented: | Not reported |
| Institutional Controls Required: | N |
| IC Category Proprietary Controls: | Not reported |
| Excavation and Disposal of Soils: | Not reported |
| Extraction of contaminants: | Not reported |
| IC Cat. Info. Devices: | Not reported |
| Removal of materials (tanks and piping, etc.): | Not reported |
| IC Cat. Gov. Controls: | Not reported |
| Reduction of Contam Bioremediation/Phytoremediation: | Not reported |
| IC Cat. Enforcement Permit Tools: | Not reported |
| Cleanup of structures: | Not reported |
| IC in place date: | Not reported |
| Additional Cleanup/Treatment Tech Info: | Not reported |
| IC in place: | N |
| Address of Data Source (URL if available) 2: | Not reported |
| Indicate whether Engineering Controls are required: | N |
| State/tribal program ID: | Not reported |
| Cover Technologies (e.g., Capping): | Not reported |
| Security (e.g., Guard, Fence): | Not reported |
| Immobilization Process: | Not reported |
| Engineering Barriers (e.g., Slurry Walls, Sheet): | Not reported |
| Other: | Not reported |
| Additional Engineering Controls Information: | Not reported |
| Address of Data Source (URL if available) 3: | Not reported |
| Indicate whether Engineering Controls are in place: | N |
| Date Engineering Controls put into place: | Not reported |
| ACRES Cleaned Up: | Not reported |
| Section 128(a) State/Tribal: | Not reported |
| Multipurpose - Cost Share Amount: | Not reported |
| Cleanup - Cost Share Amount: | Not reported |
| RLF Loan - Total Loan Amount: | Not reported |
| RLF - Loan Signed Date: | Not reported |
| RLF Loan - Anticipated Repayment Start Date: | Not reported |
| RLF Loan - Anticipated Repayment End Date: | Not reported |
| RLF Loan - Interest Rate: | Not reported |
| RLF Loan - EPA Funds Used: | Not reported |
| Contaminant Cleanup: | Not reported |
| RLF Loan - Cost Share Used: | Not reported |
| Media Affected: | Not reported |
| RLF Loan - Program Income Used: | Not reported |
| Media Cleanup: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| RLF Loan - Discounted: | Not reported |
| RLF Loan - Discount Percentage: | Not reported |
| RLF Subgrant - Total Subgrant Amount: | Not reported |
| RLF Subgrant - Signed Date: | Not reported |
| RLF Subgrant - EPA Funds Used: | Not reported |
| RLF Subgrant - Cost Share Used: | Not reported |
| RLF Subgrant - Program Income Used: | Not reported |
| RLF Direct Cleanup - Total Funding Amt: | Not reported |
| Num. of cleanup and re-dev. jobs: | Not reported |
| RLF Direct Cleanup - Source of Funding: | Not reported |
| RLF Leveraged - Funding Source Type: | Not reported |
| Past use greenspace acreage: | Not reported |
| Past use residential acreage: | Not reported |
| RLF Leveraged - Entity Providing Funding: | Not reported |
| RLF Leveraged - Funding Amount: | Not reported |
| Cleanup Completion Doc - NFA Letter Received: | N |
| Past use commercial acreage: | Not reported |
| NFA Letter Date Received: | Not reported |
| Past use industrial acreage: | 1.18 |
| Cleanup Comp Doc - Letter/Signed Rep Qualified Pro: | N |
| Future use greenspace acreage: | 1.18 |
| Letter/Signed Report Date Received: | Not reported |
| Future use residential acreage: | Not reported |
| Future use commercial acreage: | Not reported |
| Cleanup Completion Doc- Other forms of Doc: | Not reported |
| Future use industrial acreage: | Not reported |
| Climate Adapt and Mitiga - Demo or Cleanup: | Not reported |
| ReDev Activity Funded: | Not reported |
| Amount of Funding Expended on this Activity 2: | Not reported |
| Number of Redevelopment Jobs Leveraged: | Not reported |
| Climate Adaptation and Mitigation Redevelopment: | Not reported |
| Radius: | 0.5 |
| Below Poverty Number: | 5218 |
| Below Poverty Percent: | 22.44 |
| Meidan Income: | 10086 |
| Meidan Income Number: | 11647 |
| Meidan Income Percent: | 50.09 |
| Vacant Housing Number: | 857 |
| Vacant Housing Percent: | 10.11 |
| Unemployed Number: | 1278 |
| Unemployed Percent: | 5.5 |

| | |
|---|---|
| Name: | Getty Square Branch Trail Lot 1 |
| Address: | 52 Lawrence Street |
| City,State,Zip: | YONKERS, NY 10705 |
| Property ID: | 204581 |
| Property Alias: | Not reported |
| Recipient Name: | R2 TBA - New York (STAG Funded) |
| Grant Type: | Not reported |
| Property Number: | 1.-36-100 |
| Parcel Size: | 1.18 |
| Latitude: | 40.9162743 |
| Longitude: | -73.8930174 |
| Census Tract: | 36119001305 |
| State or Tribal Voluntary Response Program: | Y |
| Program Name: | Not reported |
| AA Activity Funded: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Start Date: | Not reported |
| Redev Completition Date: | Not reported |
| Completed Date: | Not reported |
| Cleanup Funding: | Not reported |
| Cleanup Funding Source: | Not reported |
| Activity Funded: | Phase II |
| Assessment Funding: | Not reported |
| Assessment Funding Source: | Not reported |
| Redevelopment Funding: | Not reported |
| Contaminants REC: | Not reported |
| Contaminants Found at Actionable Level: | Not reported |
| Redev. Funding Source: | Not reported |
| Redev. Funding Entity Name: | Not reported |
| Contaminants Found Below Actionable Level: | Not reported |
| Redevelopment Start Date: | Not reported |
| Assessment Funding Entity: | EPA |
| Cleanup Funding Entity: | Not reported |
| Climate Adapt Mitig - Planning or Assessment: | Not reported |
| Cooperative Agreement Number: | n/a |
| Start Date: | 6/7/2015 |
| Ownership Entity: | Government |
| Additional Institutional Controls Information: | Not reported |
| Completion Date: | 9/17/2015 |
| Address of Data Sources (URL if available) 1: | Not reported |
| Cleanup Required: | N |
| Indicates Cleanup/Treatment Tech Implemented: | Not reported |
| Institutional Controls Required: | N |
| IC Category Proprietary Controls: | Not reported |
| Excavation and Disposal of Soils: | Not reported |
| Extraction of contaminants: | Not reported |
| IC Cat. Info. Devices: | Not reported |
| Removal of materials (tanks and piping, etc.): | Not reported |
| IC Cat. Gov. Controls: | Not reported |
| Reduction of Contam Bioremediation/Phytoremediation: | Not reported |
| IC Cat. Enforcement Permit Tools: | Not reported |
| Cleanup of structures: | Not reported |
| IC in place date: | Not reported |
| Additional Cleanup/Treatment Tech Info: | Not reported |
| IC in place: | N |
| Address of Data Source (URL if available) 2: | Not reported |
| Indicate whether Engineering Controls are required: | N |
| State/tribal program ID: | Not reported |
| Cover Technologies (e.g., Capping): | Not reported |
| Security (e.g., Guard, Fence): | Not reported |
| Immobilization Process: | Not reported |
| Engineering Barriers (e.g., Slurry Walls, Sheet): | Not reported |
| Other: | Not reported |
| Additional Engineering Controls Information: | Not reported |
| Address of Data Source (URL if available) 3: | Not reported |
| Indicate whether Engineering Controls are in place: | N |
| Date Engineering Controls put into place: | Not reported |
| ACRES Cleaned Up: | Not reported |
| Section 128(a) State/Tribal: | Not reported |
| Multipurpose - Cost Share Amount: | Not reported |
| Cleanup - Cost Share Amount: | Not reported |
| RLF Loan - Total Loan Amount: | Not reported |
| RLF - Loan Signed Date: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| RLF Loan - Anticipated Repayment Start Date: | Not reported |
| RLF Loan - Anticipated Repayment End Date: | Not reported |
| RLF Loan - Interest Rate: | Not reported |
| RLF Loan - EPA Funds Used: | Not reported |
| Contaminant Cleanup: | Not reported |
| RLF Loan - Cost Share Used: | Not reported |
| Media Affected: | Not reported |
| RLF Loan - Program Income Used: | Not reported |
| Media Cleanup: | Not reported |
| RLF Loan - Discounted: | Not reported |
| RLF Loan - Discount Percentage: | Not reported |
| RLF Subgrant - Total Subgrant Amount: | Not reported |
| RLF Subgrant - Signed Date: | Not reported |
| RLF Subgrant - EPA Funds Used: | Not reported |
| RLF Subgrant - Cost Share Used: | Not reported |
| RLF Subgrant - Program Income Used: | Not reported |
| RLF Direct Cleanup - Total Funding Amt: | Not reported |
| Num. of cleanup and re-dev. jobs: | Not reported |
| RLF Direct Cleanup - Source of Funding: | Not reported |
| RLF Leveraged - Funding Source Type: | Not reported |
| Past use greenspace acreage: | Not reported |
| Past use residential acreage: | Not reported |
| RLF Leveraged - Entity Providing Funding: | Not reported |
| RLF Leveraged - Funding Amount: | Not reported |
| Cleanup Completion Doc - NFA Letter Received: | N |
| Past use commercial acreage: | Not reported |
| NFA Letter Date Received: | Not reported |
| Past use industrial acreage: | 1.18 |
| Cleanup Comp Doc - Letter/Signed Rep Qualified Pro: | N |
| Future use greenspace acreage: | 1.18 |
| Letter/Signed Report Date Received: | Not reported |
| Future use residential acreage: | Not reported |
| Future use commercial acreage: | Not reported |
| Cleanup Completion Doc- Other forms of Doc: | Not reported |
| Future use industrial acreage: | Not reported |
| Climate Adapt and Mitiga - Demo or Cleanup: | Not reported |
| ReDev Activity Funded: | Not reported |
| Amount of Funding Expended on this Activity 2: | Not reported |
| Number of Redevelopment Jobs Leveraged: | Not reported |
| Climate Adaptation and Mitigation Redevelopment: | Not reported |
| Radius: | 0.5 |
| Below Poverty Number: | 5218 |
| Below Poverty Percent: | 22.44 |
| Meidan Income: | 10086 |
| Meidan Income Number: | 11647 |
| Meidan Income Percent: | 50.09 |
| Vacant Housing Number: | 857 |
| Vacant Housing Percent: | 10.11 |
| Unemployed Number: | 1278 |
| Unemployed Percent: | 5.5 |

| | |
|---|---|
| Name: | Getty Square Branch Trail Lot 1 |
| Address: | 52 Lawrence Street |
| City,State,Zip: | YONKERS, NY 10705 |
| Property ID: | 204581 |
| Property Alias: | Not reported |
| Recipient Name: | R2 TBA - New York (STAG Funded) |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Grant Type: | Not reported |
| Property Number: | 1.-36-100 |
| Parcel Size: | 1.18 |
| Latitude: | 40.9162743 |
| Longitude: | -73.8930174 |
| Census Tract: | 36119001305 |
| State or Tribal Voluntary Response Program: | Y |
| Program Name: | Not reported |
| AA Activity Funded: | Not reported |
| Start Date: | Not reported |
| Redev Completition Date: | Not reported |
| Completed Date: | Not reported |
| Cleanup Funding: | Not reported |
| Cleanup Funding Source: | Not reported |
| Activity Funded: | Not reported |
| Assessment Funding: | Not reported |
| Assessment Funding Source: | Not reported |
| Redevelopment Funding: | Not reported |
| Contaminants REC: | Not reported |
| Contaminants Found at Actionable Level: | Not reported |
| Redev. Funding Source: | Not reported |
| Redev. Funding Entity Name: | Not reported |
| Contaminants Found Below Actionable Level: | Not reported |
| Redevelopment Start Date: | Not reported |
| Assessment Funding Entity: | Not reported |
| Cleanup Funding Entity: | Not reported |
| Climate Adapt Mitig - Planning or Assessment: | Not reported |
| Cooperative Agreement Number: | n/a |
| Start Date: | Not reported |
| Ownership Entity: | Government |
| Additional Institutional Controls Information: | Not reported |
| Completion Date: | Not reported |
| Address of Data Sources (URL if available) 1: | Not reported |
| Cleanup Required: | N |
| Indicates Cleanup/Treatment Tech Implemented: | Not reported |
| Institutional Controls Required: | N |
| IC Category Proprietary Controls: | Not reported |
| Excavation and Disposal of Soils: | Not reported |
| Extraction of contaminants: | Not reported |
| IC Cat. Info. Devices: | Not reported |
| Removal of materials (tanks and piping, etc.): | Not reported |
| IC Cat. Gov. Controls: | Not reported |
| Reduction of Contam Bioremediation/Phytoremediation: | Not reported |
| IC Cat. Enforcement Permit Tools: | Not reported |
| Cleanup of structures: | Not reported |
| IC in place date: | Not reported |
| Additional Cleanup/Treatment Tech Info: | Not reported |
| IC in place: | N |
| Address of Data Source (URL if available) 2: | Not reported |
| Indicate whether Engineering Controls are required: | N |
| State/tribal program ID: | Not reported |
| Cover Technologies (e.g., Capping): | Not reported |
| Security (e.g., Guard, Fence): | Not reported |
| Immobilization Process: | Not reported |
| Engineering Barriers (e.g., Slurry Walls, Sheet): | Not reported |
| Other: | Not reported |
| Additional Engineering Controls Information: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Address of Data Source (URL if available) 3: | Not reported |
| Indicate whether Engineering Controls are in place: | N |
| Date Engineering Controls put into place: | Not reported |
| ACRES Cleaned Up: | Not reported |
| Section 128(a) State/Tribal: | Not reported |
| Multipurpose - Cost Share Amount: | Not reported |
| Cleanup - Cost Share Amount: | Not reported |
| RLF Loan - Total Loan Amount: | Not reported |
| RLF - Loan Signed Date: | Not reported |
| RLF Loan - Anticipated Repayment Start Date: | Not reported |
| RLF Loan - Anticipated Repayment End Date: | Not reported |
| RLF Loan - Interest Rate: | Not reported |
| RLF Loan - EPA Funds Used: | Not reported |
| Contaminant Cleanup: | Not reported |
| RLF Loan - Cost Share Used: | Not reported |
| Media Affected: | Not reported |
| RLF Loan - Program Income Used: | Not reported |
| Media Cleanup: | Not reported |
| RLF Loan - Discounted: | Not reported |
| RLF Loan - Discount Percentage: | Not reported |
| RLF Subgrant - Total Subgrant Amount: | Not reported |
| RLF Subgrant - Signed Date: | Not reported |
| RLF Subgrant - EPA Funds Used: | Not reported |
| RLF Subgrant - Cost Share Used: | Not reported |
| RLF Subgrant - Program Income Used: | Not reported |
| RLF Direct Cleanup - Total Funding Amt: | Not reported |
| Num. of cleanup and re-dev. jobs: | Not reported |
| RLF Direct Cleanup - Source of Funding: | Not reported |
| RLF Leveraged - Funding Source Type: | Not reported |
| Past use greenspace acreage: | Not reported |
| Past use residential acreage: | Not reported |
| RLF Leveraged - Entity Providing Funding: | Not reported |
| RLF Leveraged - Funding Amount: | Not reported |
| Cleanup Completion Doc - NFA Letter Received: | Not reported |
| Past use commercial acreage: | Not reported |
| NFA Letter Date Received: | Not reported |
| Past use industrial acreage: | 1.18 |
| Cleanup Comp Doc - Letter/Signed Rep Qualified Pro: | Not reported |
| Future use greenspace acreage: | 1.18 |
| Letter/Signed Report Date Received: | Not reported |
| Future use residential acreage: | Not reported |
| Future use commercial acreage: | Not reported |
| Cleanup Completion Doc- Other forms of Doc: | Not reported |
| Future use industrial acreage: | Not reported |
| Climate Adapt and Mitiga - Demo or Cleanup: | Not reported |
| ReDev Activity Funded: | Not reported |
| Amount of Funding Expended on this Activity 2: | Not reported |
| Number of Redevelopment Jobs Leveraged: | Not reported |
| Climate Adaptation and Mitigation Redevelopment: | Not reported |
| Radius: | 0.5 |
| Below Poverty Number: | 5218 |
| Below Poverty Percent: | 22.44 |
| Meidan Income: | 10086 |
| Meidan Income Number: | 11647 |
| Meidan Income Percent: | 50.09 |
| Vacant Housing Number: | 857 |
| Vacant Housing Percent: | 10.11 |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Unemployed Number: | 1278 |
| Unemployed Percent: | 5.5 |
| | |
| Name: | Getty Square Branch Trail Lot 1 |
| Address: | 52 Lawrence Street |
| City,State,Zip: | YONKERS, NY 10705 |
| Property ID: | 204581 |
| Property Alias: | Not reported |
| Recipient Name: | R2 TBA - New York (STAG Funded) |
| Grant Type: | Not reported |
| Property Number: | 1.-36-100 |
| Parcel Size: | 1.18 |
| Latitude: | 40.9162743 |
| Longitude: | -73.8930174 |
| Census Tract: | 36119001305 |
| State or Tribal Voluntary Response Program: | Y |
| Program Name: | Not reported |
| AA Activity Funded: | Not reported |
| Start Date: | Not reported |
| Redev Completition Date: | Not reported |
| Completed Date: | Not reported |
| Cleanup Funding: | Not reported |
| Cleanup Funding Source: | Not reported |
| Activity Funded: | Not reported |
| Assessment Funding: | Not reported |
| Assessment Funding Source: | Not reported |
| Redevelopment Funding: | Not reported |
| Contaminants REC: | Not reported |
| Contaminants Found at Actionable Level: | Not reported |
| Redev. Funding Source: | Not reported |
| Redev. Funding Entity Name: | Not reported |
| Contaminants Found Below Actionable Level: | Not reported |
| Redevelopment Start Date: | Not reported |
| Assessment Funding Entity: | Not reported |
| Cleanup Funding Entity: | Not reported |
| Climate Adapt Mitig - Planning or Assessment: | Not reported |
| Cooperative Agreement Number: | n/a |
| Start Date: | Not reported |
| Ownership Entity: | Government |
| Additional Institutional Controls Information: | Not reported |
| Completion Date: | Not reported |
| Address of Data Sources (URL if available) 1: | Not reported |
| Cleanup Required: | N |
| Indicates Cleanup/Treatment Tech Implemented: | Not reported |
| Institutional Controls Required: | N |
| IC Category Proprietary Controls: | Not reported |
| Excavation and Disposal of Soils: | Not reported |
| Extraction of contaminants: | Not reported |
| IC Cat. Info. Devices: | Not reported |
| Removal of materials (tanks and piping, etc.): | Not reported |
| IC Cat. Gov. Controls: | Not reported |
| Reduction of Contam Bioremediation/Phytoremediation: | Not reported |
| IC Cat. Enforcement Permit Tools: | Not reported |
| Cleanup of structures: | Not reported |
| IC in place date: | Not reported |
| Additional Cleanup/Treatment Tech Info: | Not reported |
| IC in place: | N |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Address of Data Source (URL if available) 2: | Not reported |
| Indicate whether Engineering Controls are required: | N |
| State/tribal program ID: | Not reported |
| Cover Technologies (e.g., Capping): | Not reported |
| Security (e.g., Guard, Fence): | Not reported |
| Immobilization Process: | Not reported |
| Engineering Barriers (e.g., Slurry Walls, Sheet): | Not reported |
| Other: | Not reported |
| Additional Engineering Controls Information: | Not reported |
| Address of Data Source (URL if available) 3: | Not reported |
| Indicate whether Engineering Controls are in place: | N |
| Date Engineering Controls put into place: | Not reported |
| ACRES Cleaned Up: | Not reported |
| Section 128(a) State/Tribal: | Not reported |
| Multipurpose - Cost Share Amount: | Not reported |
| Cleanup - Cost Share Amount: | Not reported |
| RLF Loan - Total Loan Amount: | Not reported |
| RLF - Loan Signed Date: | Not reported |
| RLF Loan - Anticipated Repayment Start Date: | Not reported |
| RLF Loan - Anticipated Repayment End Date: | Not reported |
| RLF Loan - Interest Rate: | Not reported |
| RLF Loan - EPA Funds Used: | Not reported |
| Contaminant Cleanup: | Not reported |
| RLF Loan - Cost Share Used: | Not reported |
| Media Affected: | Not reported |
| RLF Loan - Program Income Used: | Not reported |
| Media Cleanup: | Not reported |
| RLF Loan - Discounted: | Not reported |
| RLF Loan - Discount Percentage: | Not reported |
| RLF Subgrant - Total Subgrant Amount: | Not reported |
| RLF Subgrant - Signed Date: | Not reported |
| RLF Subgrant - EPA Funds Used: | Not reported |
| RLF Subgrant - Cost Share Used: | Not reported |
| RLF Subgrant - Program Income Used: | Not reported |
| RLF Direct Cleanup - Total Funding Amt: | Not reported |
| Num. of cleanup and re-dev. jobs: | Not reported |
| RLF Direct Cleanup - Source of Funding: | Not reported |
| RLF Leveraged - Funding Source Type: | Not reported |
| Past use greenspace acreage: | Not reported |
| Past use residential acreage: | Not reported |
| RLF Leveraged - Entity Providing Funding: | Not reported |
| RLF Leveraged - Funding Amount: | Not reported |
| Cleanup Completion Doc - NFA Letter Received: | N |
| Past use commercial acreage: | Not reported |
| NFA Letter Date Received: | Not reported |
| Past use industrial acreage: | 1.18 |
| Cleanup Comp Doc - Letter/Signed Rep Qualified Pro: | N |
| Future use greenspace acreage: | 1.18 |
| Letter/Signed Report Date Received: | Not reported |
| Future use residential acreage: | Not reported |
| Future use commercial acreage: | Not reported |
| Cleanup Completion Doc- Other forms of Doc: | Not reported |
| Future use industrial acreage: | Not reported |
| Climate Adapt and Mitiga - Demo or Cleanup: | Not reported |
| ReDev Activity Funded: | Not reported |
| Amount of Funding Expended on this Activity 2: | Not reported |
| Number of Redevelopment Jobs Leveraged: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Climate Adaptation and Mitigation Redevelopment: | Not reported |
| Radius: | 0.5 |
| Below Poverty Number: | 5218 |
| Below Poverty Percent: | 22.44 |
| Meidan Income: | 10086 |
| Meidan Income Number: | 11647 |
| Meidan Income Percent: | 50.09 |
| Vacant Housing Number: | 857 |
| Vacant Housing Percent: | 10.11 |
| Unemployed Number: | 1278 |
| Unemployed Percent: | 5.5 |

| | |
|---|---|
| Name: | Getty Square Branch Trail Lot 1 |
| Address: | 52 Lawrence Street |
| City,State,Zip: | YONKERS, NY 10705 |
| Property ID: | 204581 |
| Property Alias: | Not reported |
| Recipient Name: | R2 TBA - New York (STAG Funded) |
| Grant Type: | Not reported |
| Property Number: | 1.-36-100 |
| Parcel Size: | 1.18 |
| Latitude: | 40.9162743 |
| Longitude: | -73.8930174 |
| Census Tract: | 36119001305 |
| State or Tribal Voluntary Response Program: | Y |
| Program Name: | Not reported |
| AA Activity Funded: | Not reported |
| Start Date: | Not reported |
| Redev Completition Date: | Not reported |
| Completed Date: | Not reported |
| Cleanup Funding: | Not reported |
| Cleanup Funding Source: | Not reported |
| Activity Funded: | Phase II |
| Assessment Funding: | Not reported |
| Assessment Funding Source: | Not reported |
| Redevelopment Funding: | Not reported |
| Contaminants REC: | Not reported |
| Contaminants Found at Actionable Level: | Not reported |
| Redev. Funding Source: | Not reported |
| Redev. Funding Entity Name: | Not reported |
| Contaminants Found Below Actionable Level: | Not reported |
| Redevelopment Start Date: | Not reported |
| Assessment Funding Entity: | Not reported |
| Cleanup Funding Entity: | Not reported |
| Climate Adapt Mitig - Planning or Assessment: | Not reported |
| Cooperative Agreement Number: | n/a |
| Start Date: | Not reported |
| Ownership Entity: | Government |
| Additional Institutional Controls Information: | Not reported |
| Completion Date: | Not reported |
| Address of Data Sources (URL if available) 1: | Not reported |
| Cleanup Required: | N |
| Indicates Cleanup/Treatment Tech Implemented: | Not reported |
| Institutional Controls Required: | N |
| IC Category Proprietary Controls: | Not reported |
| Excavation and Disposal of Soils: | Not reported |
| Extraction of contaminants: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| IC Cat. Info. Devices: | Not reported |
| Removal of materials (tanks and piping, etc.): | Not reported |
| IC Cat. Gov. Controls: | Not reported |
| Reduction of Contam Bioremediation/Phytoremediation: | Not reported |
| IC Cat. Enforcement Permit Tools: | Not reported |
| Cleanup of structures: | Not reported |
| IC in place date: | Not reported |
| Additional Cleanup/Treatment Tech Info: | Not reported |
| IC in place: | N |
| Address of Data Source (URL if available) 2: | Not reported |
| Indicate whether Engineering Controls are required: | N |
| State/tribal program ID: | Not reported |
| Cover Technologies (e.g., Capping): | Not reported |
| Security (e.g., Guard, Fence): | Not reported |
| Immobilization Process: | Not reported |
| Engineering Barriers (e.g., Slurry Walls, Sheet): | Not reported |
| Other: | Not reported |
| Additional Engineering Controls Information: | Not reported |
| Address of Data Source (URL if available) 3: | Not reported |
| Indicate whether Engineering Controls are in place: | N |
| Date Engineering Controls put into place: | Not reported |
| ACRES Cleaned Up: | Not reported |
| Section 128(a) State/Tribal: | Not reported |
| Multipurpose - Cost Share Amount: | Not reported |
| Cleanup - Cost Share Amount: | Not reported |
| RLF Loan - Total Loan Amount: | Not reported |
| RLF - Loan Signed Date: | Not reported |
| RLF Loan - Anticipated Repayment Start Date: | Not reported |
| RLF Loan - Anticipated Repayment End Date: | Not reported |
| RLF Loan - Interest Rate: | Not reported |
| RLF Loan - EPA Funds Used: | Not reported |
| Contaminant Cleanup: | Not reported |
| RLF Loan - Cost Share Used: | Not reported |
| Media Affected: | Not reported |
| RLF Loan - Program Income Used: | Not reported |
| Media Cleanup: | Not reported |
| RLF Loan - Discounted: | Not reported |
| RLF Loan - Discount Percentage: | Not reported |
| RLF Subgrant - Total Subgrant Amount: | Not reported |
| RLF Subgrant - Signed Date: | Not reported |
| RLF Subgrant - EPA Funds Used: | Not reported |
| RLF Subgrant - Cost Share Used: | Not reported |
| RLF Subgrant - Program Income Used: | Not reported |
| RLF Direct Cleanup - Total Funding Amt: | Not reported |
| Num. of cleanup and re-dev. jobs: | Not reported |
| RLF Direct Cleanup - Source of Funding: | Not reported |
| RLF Leveraged - Funding Source Type: | Not reported |
| Past use greenspace acreage: | Not reported |
| Past use residential acreage: | Not reported |
| RLF Leveraged - Entity Providing Funding: | Not reported |
| RLF Leveraged - Funding Amount: | Not reported |
| Cleanup Completion Doc - NFA Letter Received: | N |
| Past use commercial acreage: | Not reported |
| NFA Letter Date Received: | Not reported |
| Past use industrial acreage: | 1.18 |
| Cleanup Comp Doc - Letter/Signed Rep Qualified Pro: | N |
| Future use greenspace acreage: | 1.18 |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Letter/Signed Report Date Received: | Not reported |
| Future use residential acreage: | Not reported |
| Future use commercial acreage: | Not reported |
| Cleanup Completion Doc- Other forms of Doc: | Not reported |
| Future use industrial acreage: | Not reported |
| Climate Adapt and Mitiga - Demo or Cleanup: | Not reported |
| ReDev Activity Funded: | Not reported |
| Amount of Funding Expended on this Activity 2: | Not reported |
| Number of Redevelopment Jobs Leveraged: | Not reported |
| Climate Adaptation and Mitigation Redevelopment: | Not reported |
| Radius: | 0.5 |
| Below Poverty Number: | 5218 |
| Below Poverty Percent: | 22.44 |
| Meidan Income: | 10086 |
| Meidan Income Number: | 11647 |
| Meidan Income Percent: | 50.09 |
| Vacant Housing Number: | 857 |
| Vacant Housing Percent: | 10.11 |
| Unemployed Number: | 1278 |
| Unemployed Percent: | 5.5 |

| | |
|---|---|
| Name: | Getty Square Branch Trail Lot 1 |
| Address: | 52 Lawrence Street |
| City,State,Zip: | YONKERS, NY 10705 |
| Property ID: | 204581 |
| Property Alias: | Not reported |
| Recipient Name: | R2 TBA - New York (STAG Funded) |
| Grant Type: | Not reported |
| Property Number: | 1.-36-100 |
| Parcel Size: | 1.18 |
| Latitude: | 40.9162743 |
| Longitude: | -73.8930174 |
| Census Tract: | 36119001305 |
| State or Tribal Voluntary Response Program: | Y |
| Program Name: | Not reported |
| AA Activity Funded: | Phase II |
| Start Date: | Not reported |
| Redev Completition Date: | Not reported |
| Completed Date: | Not reported |
| Cleanup Funding: | Not reported |
| Cleanup Funding Source: | Not reported |
| Activity Funded: | Phase II |
| Assessment Funding: | Not reported |
| Assessment Funding Source: | Not reported |
| Redevelopment Funding: | Not reported |
| Contaminants REC: | Not reported |
| Contaminants Found at Actionable Level: | Not reported |
| Redev. Funding Source: | Not reported |
| Redev. Funding Entity Name: | Not reported |
| Contaminants Found Below Actionable Level: | Not reported |
| Redevelopment Start Date: | Not reported |
| Assessment Funding Entity: | EPA |
| Cleanup Funding Entity: | Not reported |
| Climate Adapt Mitig - Planning or Assessment: | Not reported |
| Cooperative Agreement Number: | n/a |
| Start Date: | 10/15/2015 |
| Ownership Entity: | Government |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Additional Institutional Controls Information: | Not reported |
| Completion Date: | 2/11/2016 |
| Address of Data Sources (URL if available) 1: | Not reported |
| Cleanup Required: | N |
| Indicates Cleanup/Treatment Tech Implemented: | Not reported |
| Institutional Controls Required: | N |
| IC Category Proprietary Controls: | Not reported |
| Excavation and Disposal of Soils: | Not reported |
| Extraction of contaminants: | Not reported |
| IC Cat. Info. Devices: | Not reported |
| Removal of materials (tanks and piping, etc.): | Not reported |
| IC Cat. Gov. Controls: | Not reported |
| Reduction of Contam Bioremediation/Phytoremediation: | Not reported |
| IC Cat. Enforcement Permit Tools: | Not reported |
| Cleanup of structures: | Not reported |
| IC in place date: | Not reported |
| Additional Cleanup/Treatment Tech Info: | Not reported |
| IC in place: | N |
| Address of Data Source (URL if available) 2: | Not reported |
| Indicate whether Engineering Controls are required: | N |
| State/tribal program ID: | Not reported |
| Cover Technologies (e.g., Capping): | Not reported |
| Security (e.g., Guard, Fence): | Not reported |
| Immobilization Process: | Not reported |
| Engineering Barriers (e.g., Slurry Walls, Sheet): | Not reported |
| Other: | Not reported |
| Additional Engineering Controls Information: | Not reported |
| Address of Data Source (URL if available) 3: | Not reported |
| Indicate whether Engineering Controls are in place: | N |
| Date Engineering Controls put into place: | Not reported |
| ACRES Cleaned Up: | Not reported |
| Section 128(a) State/Tribal: | Not reported |
| Multipurpose - Cost Share Amount: | Not reported |
| Cleanup - Cost Share Amount: | Not reported |
| RLF Loan - Total Loan Amount: | Not reported |
| RLF - Loan Signed Date: | Not reported |
| RLF Loan - Anticipated Repayment Start Date: | Not reported |
| RLF Loan - Anticipated Repayment End Date: | Not reported |
| RLF Loan - Interest Rate: | Not reported |
| RLF Loan - EPA Funds Used: | Not reported |
| Contaminant Cleanup: | Not reported |
| RLF Loan - Cost Share Used: | Not reported |
| Media Affected: | Not reported |
| RLF Loan - Program Income Used: | Not reported |
| Media Cleanup: | Not reported |
| RLF Loan - Discounted: | Not reported |
| RLF Loan - Discount Percentage: | Not reported |
| RLF Subgrant - Total Subgrant Amount: | Not reported |
| RLF Subgrant - Signed Date: | Not reported |
| RLF Subgrant - EPA Funds Used: | Not reported |
| RLF Subgrant - Cost Share Used: | Not reported |
| RLF Subgrant - Program Income Used: | Not reported |
| RLF Direct Cleanup - Total Funding Amt: | Not reported |
| Num. of cleanup and re-dev. jobs: | Not reported |
| RLF Direct Cleanup - Source of Funding: | Not reported |
| RLF Leveraged - Funding Source Type: | Not reported |
| Past use greenspace acreage: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Past use residential acreage: | Not reported |
| RLF Leveraged - Entity Providing Funding: | Not reported |
| RLF Leveraged - Funding Amount: | Not reported |
| Cleanup Completion Doc - NFA Letter Received: | N |
| Past use commercial acreage: | Not reported |
| NFA Letter Date Received: | Not reported |
| Past use industrial acreage: | 1.18 |
| Cleanup Comp Doc - Letter/Signed Rep Qualified Pro: | N |
| Future use greenspace acreage: | 1.18 |
| Letter/Signed Report Date Received: | Not reported |
| Future use residential acreage: | Not reported |
| Future use commercial acreage: | Not reported |
| Cleanup Completion Doc- Other forms of Doc: | Not reported |
| Future use industrial acreage: | Not reported |
| Climate Adapt and Mitiga - Demo or Cleanup: | Not reported |
| ReDev Activity Funded: | Not reported |
| Amount of Funding Expended on this Activity 2: | Not reported |
| Number of Redevelopment Jobs Leveraged: | Not reported |
| Climate Adaptation and Mitigation Redevelopment: | Not reported |
| Radius: | 0.5 |
| Below Poverty Number: | 5218 |
| Below Poverty Percent: | 22.44 |
| Meidan Income: | 10086 |
| Meidan Income Number: | 11647 |
| Meidan Income Percent: | 50.09 |
| Vacant Housing Number: | 857 |
| Vacant Housing Percent: | 10.11 |
| Unemployed Number: | 1278 |
| Unemployed Percent: | 5.5 |

| | |
|---|---|
| Name: | Getty Square Branch Trail Lot 1 |
| Address: | 52 Lawrence Street |
| City,State,Zip: | YONKERS, NY 10705 |
| Property ID: | 204581 |
| Property Alias: | Not reported |
| Recipient Name: | R2 TBA - New York (STAG Funded) |
| Grant Type: | Not reported |
| Property Number: | 1.-36-100 |
| Parcel Size: | 1.18 |
| Latitude: | 40.9162743 |
| Longitude: | -73.8930174 |
| Census Tract: | 36119001305 |
| State or Tribal Voluntary Response Program: | Y |
| Program Name: | Not reported |
| AA Activity Funded: | Phase II |
| Start Date: | Not reported |
| Redev Completition Date: | Not reported |
| Completed Date: | Not reported |
| Cleanup Funding: | Not reported |
| Cleanup Funding Source: | Not reported |
| Activity Funded: | Not reported |
| Assessment Funding: | Not reported |
| Assessment Funding Source: | Not reported |
| Redevelopment Funding: | Not reported |
| Contaminants REC: | Not reported |
| Contaminants Found at Actionable Level: | Not reported |
| Redev. Funding Source: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| Redev. Funding Entity Name: | Not reported |
| Contaminants Found Below Actionable Level: | Not reported |
| Redevelopment Start Date: | Not reported |
| Assessment Funding Entity: | EPA |
| Cleanup Funding Entity: | Not reported |
| Climate Adapt Mitig - Planning or Assessment: | Not reported |
| Cooperative Agreement Number: | n/a |
| Start Date: | 10/15/2015 |
| Ownership Entity: | Government |
| Additional Institutional Controls Information: | Not reported |
| Completion Date: | 2/11/2016 |
| Address of Data Sources (URL if available) 1: | Not reported |
| Cleanup Required: | N |
| Indicates Cleanup/Treatment Tech Implemented: | Not reported |
| Institutional Controls Required: | N |
| IC Category Proprietary Controls: | Not reported |
| Excavation and Disposal of Soils: | Not reported |
| Extraction of contaminants: | Not reported |
| IC Cat. Info. Devices: | Not reported |
| Removal of materials (tanks and piping, etc.): | Not reported |
| IC Cat. Gov. Controls: | Not reported |
| Reduction of Contam Bioremediation/Phytoremediation: | Not reported |
| IC Cat. Enforcement Permit Tools: | Not reported |
| Cleanup of structures: | Not reported |
| IC in place date: | Not reported |
| Additional Cleanup/Treatment Tech Info: | Not reported |
| IC in place: | N |
| Address of Data Source (URL if available) 2: | Not reported |
| Indicate whether Engineering Controls are required: | N |
| State/tribal program ID: | Not reported |
| Cover Technologies (e.g., Capping): | Not reported |
| Security (e.g., Guard, Fence): | Not reported |
| Immobilization Process: | Not reported |
| Engineering Barriers (e.g., Slurry Walls, Sheet): | Not reported |
| Other: | Not reported |
| Additional Engineering Controls Information: | Not reported |
| Address of Data Source (URL if available) 3: | Not reported |
| Indicate whether Engineering Controls are in place: | N |
| Date Engineering Controls put into place: | Not reported |
| ACRES Cleaned Up: | Not reported |
| Section 128(a) State/Tribal: | Not reported |
| Multipurpose - Cost Share Amount: | Not reported |
| Cleanup - Cost Share Amount: | Not reported |
| RLF Loan - Total Loan Amount: | Not reported |
| RLF - Loan Signed Date: | Not reported |
| RLF Loan - Anticipated Repayment Start Date: | Not reported |
| RLF Loan - Anticipated Repayment End Date: | Not reported |
| RLF Loan - Interest Rate: | Not reported |
| RLF Loan - EPA Funds Used: | Not reported |
| Contaminant Cleanup: | Not reported |
| RLF Loan - Cost Share Used: | Not reported |
| Media Affected: | Not reported |
| RLF Loan - Program Income Used: | Not reported |
| Media Cleanup: | Not reported |
| RLF Loan - Discounted: | Not reported |
| RLF Loan - Discount Percentage: | Not reported |
| RLF Subgrant - Total Subgrant Amount: | Not reported |

**GETTY SQUARE BRANCH TRAIL LOT 1 (Continued)** **1018149749**

| | |
|---|---|
| RLF Subgrant - Signed Date: | Not reported |
| RLF Subgrant - EPA Funds Used: | Not reported |
| RLF Subgrant - Cost Share Used: | Not reported |
| RLF Subgrant - Program Income Used: | Not reported |
| RLF Direct Cleanup - Total Funding Amt: | Not reported |
| Num. of cleanup and re-dev. jobs: | Not reported |
| RLF Direct Cleanup - Source of Funding: | Not reported |
| RLF Leveraged - Funding Source Type: | Not reported |
| Past use greenspace acreage: | Not reported |
| Past use residential acreage: | Not reported |
| RLF Leveraged - Entity Providing Funding: | Not reported |
| RLF Leveraged - Funding Amount: | Not reported |
| Cleanup Completion Doc - NFA Letter Received: | N |
| Past use commercial acreage: | Not reported |
| NFA Letter Date Received: | Not reported |
| Past use industrial acreage: | 1.18 |
| Cleanup Comp Doc - Letter/Signed Rep Qualified Pro: | N |
| Future use greenspace acreage: | 1.18 |
| Letter/Signed Report Date Received: | Not reported |
| Future use residential acreage: | Not reported |
| Future use commercial acreage: | Not reported |
| Cleanup Completion Doc- Other forms of Doc: | Not reported |
| Future use industrial acreage: | Not reported |
| Climate Adapt and Mitiga - Demo or Cleanup: | Not reported |
| ReDev Activity Funded: | Not reported |
| Amount of Funding Expended on this Activity 2: | Not reported |
| Number of Redevelopment Jobs Leveraged: | Not reported |
| Climate Adaptation and Mitigation Redevelopment: | Not reported |
| Radius: | 0.5 |
| Below Poverty Number: | 5218 |
| Below Poverty Percent: | 22.44 |
| Meidan Income: | 10086 |
| Meidan Income Number: | 11647 |
| Meidan Income Percent: | 50.09 |
| Vacant Housing Number: | 857 |
| Vacant Housing Percent: | 10.11 |
| Unemployed Number: | 1278 |
| Unemployed Percent: | 5.5 |

---

**323**
**North**
**1/4-1/2**
**0.449 mi.**
**2372 ft.**

**185 - 187 RIVERDALE AVE.**
**185 RIVERDALE AVENUE**
**YONKERS, NY 10701**

**NY LTANKS** **S106123955**
**NY ENG CONTROLS** **N/A**
**NY INST CONTROL**
**NY BROWNFIELDS**
**NY Spills**

**Relative:**
**Higher**

**Actual:**
**56 ft.**

LTANKS:

| | |
|---|---|
| Name: | 185-187 RIVERDALE AVE |
| Address: | 185 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0313176 / 2005-01-05 |
| Facility ID: | 0313176 |
| Site ID: | 175695 |
| Spill Date: | 2004-02-24 |
| Spill Cause: | Tank Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

| | |
|---|---|
| Investigator: | jbodee |
| Referred To: | WCHD |
| Reported to Dept: | 2004-03-01 |
| CID: | 403 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2004-03-01 |
| Spill Record Last Update: | 2008-12-09 |
| Spiller Name: | TOM CONNEALLY |
| Spiller Company: | 185-187 RIVERDALE AVE |
| Spiller Address: | 185-187 RIVERDALE AVE |
| Spiller County: | 001 |
| Spiller Contact: | TOM CONNEALLY |
| Spiller Phone: | (914) 965-9127 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 147672 |
| Latitude: | 40.9264796 |
| Longitude: | -73.9010359 |
| DEC Memo: | 01/05/05 DUPLICATE REPORT. REFER TO SPILL 03-11496 BEING HANDLED BY STEFAN GOREAU OF WCHD. NFA THIS NUMBER. jod Brownsfield project being handled under Spill 05-04471. jod |
| Remarks: | out of service tank soil results from lab recieved today show several chemicals over the state limits. |

All TTF:

| | |
|---|---|
| Facility ID: | 0313176 |
| Spill Number: | 0313176 |
| Spill Tank Test: | 1529007 |
| Site ID: | 175695 |
| Tank Number: | 1 |
| Tank Size: | 1000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 175695 |
| Operable Unit ID: | 880345 |
| Operable Unit: | 01 |
| Material ID: | 498332 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

| | |
|---|---|
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | L |
| Recovered: | .00 |
| Oxygenate: | Not reported |

ENG CONTROLS:

| | |
|---|---|
| Name: | 185 - 187 RIVERDALE AVE. |
| Address: | 185 RIVERDALE AVENUE |
| City,State,Zip: | YONKERS, NY 10701 |
| Site Code: | 59028 |
| HW Code: | C360074 |
| Control Code: | 15 |
| Control Type: | ENG |
| Date Record Added: | 11/02/2006 |
| Date Rec Updated: | 08/29/2023 |
| Updated By: | ARMALAME |
| Site Description: | Location: The site is located in an urban and industrial portion of Westchester County, NY. The site is 0.850 acres and approximately one mile south from the downtown area of Yonkers. Site Features: The site is bordered to the north by an undeveloped property and Highland Avenue; to the east by Riverdale Avenue and residential apartment buildings; to the south by a commercial building and an auto body repair shop; and to the west by multi-family residences located along Hawthorne Avenue. Current Zoning and Land Use: The site has been developed as a multi-story senior housing complex, and zoned commercial. Past Use of the Site: Prior uses that led to site contamination include a former automobile dismantling yard, junkyard, machine shop, and commercial laundry service. Site Geology and Hydrogeology: Groundwater flow is towards the west. Depth to groundwater was approximately 6 feet below ground surface (bgs). Bedrock was encountered at 32 and 42.5 feet bgs. |
| Env Problem: | Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were naphthalene, fluoranthene, phenanthrene, chrysene, pyrene, PCBs, arsenic, barium, chromium, and lead in the soil and groundwater. Residual contamination in the soil and groundwater is being managed under a Site Managment Plan. |
| Health Problem: | Direct contact with residual contaminants in soil is not expected because the site has been covered with pavement, a building and two feet of clean soil in green areas. Exposure to site related contaminants in drinking water is not expected since homes and businesses near the site are connected to public water. Soil vapor intrusion in future buildings is not expected because volatile organic compounds are not a site related contaminant. An environmental easement will restrict the use of groundwater, require implementation of a site management plan and periodic certification that the remedy remains in place and is effective. |
| Dump: | False |
| Structure: | False |
| Lagoon: | False |
| Landfill: | False |
| Pond: | False |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | 40.9263N / 73.9009W |
| Dell: | False |

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

| | |
|---|---|
| Record Add: | 2004-08-04 08:36:00 |
| Record Upd: | 2009-06-10 14:00:00 |
| Updated By: | THKNIZEK |
| Own Op: | 6 |
| Sub Type: | 09 |
| Owner Name: | Mr. Tommy Conneally |
| Owner Company: | 185 Riverdale Avenue LLC |
| Owner Address: | 185 Riverdale Avenue |
| Owner Addr2: | Suite 101 |
| Owner City,St,Zip: | Yonkers, NY 10705 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | 06 |
| Owner Name: | Mr. Tommy Conneally |
| Owner Company: | 185 Riverdale Avenue LLC |
| Owner Address: | 185 Riverdale Avenue |
| Owner Addr2: | Suite 101 |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | 6 |
| Sub Type: | 09 |
| Owner Name: | Mr. Tommy Conneally |
| Owner Company: | Cottage International Development Group |
| Owner Address: | 185 Riverdale Avenue |
| Owner Addr2: | Suite 101 |
| Owner City,St,Zip: | Yonkers, NY 10705 |
| Owner Country: | United States of America |
| HW Code: | C360074 |
| Waste Type: | LEAD |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | MERCURY |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | benzo(k)fluoranthene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | CADMIUM |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | CHROMIUM |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | COPPER |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | NICKEL |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | ZINC |

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

| | |
|---|---|
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | ARSENIC |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | BARIUM |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | CALCIUM |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | IRON |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | BENZ(A)ANTHRACENE |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | BENZO(B)FLUORANTHENE |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | BENZO(A)PYRENE |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | BENZO[K]FLUORANTHENE |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | benzo(a)anthracene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| Crossref ID: | w3-1039-05-01 |
| Cross Ref Type Code: | 23 |
| Cross Ref Type: | Agreement/Consent Order Number |
| Record Added Date: | 2009-06-01 15:05:00 |
| Record Updated: | 2009-06-01 15:05:00 |
| Updated By: | THKNIZEK |

INST CONTROL:

| | |
|---|---|
| Name: | 185 - 187 RIVERDALE AVE. |
| Address: | 185 RIVERDALE AVENUE |
| City,State,Zip: | YONKERS, NY 10701 |
| Site Code: | 59028 |
| Control Name: | Building Use Restriction |
| HW Code: | C360074 |
| Control Code: | 26 |
| Control Type: | INST |
| Dt record added: | 11/02/2006 |
| Dt rec updated: | 08/29/2023 |
| Updated By: | ARMALAME |

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

| | |
|---|---|
| Site Code: | 59028 |
| Site Description: | Location: The site is located in an urban and industrial portion of Westchester County, NY. The site is 0.850 acres and approximately one mile south from the downtown area of Yonkers. Site Features: The site is bordered to the north by an undeveloped property and Highland Avenue; to the east by Riverdale Avenue and residential apartment buildings; to the south by a commercial building and an auto body repair shop; and to the west by multi-family residences located along Hawthorne Avenue. Current Zoning and Land Use: The site has been developed as a multi-story senior housing complex, and zoned commercial. Past Use of the Site: Prior uses that led to site contamination include a former automobile dismantling yard, junkyard, machine shop, and commercial laundry service. Site Geology and Hydrogeology: Groundwater flow is towards the west. Depth to groundwater was approximately 6 feet below ground surface (bgs). Bedrock was encountered at 32 and 42.5 feet bgs. |
| Env Problem: | Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were naphthalene, fluoranthene, phenanthrene, chrysene, pyrene, PCBs, arsenic, barium, chromium, and lead in the soil and groundwater. Residual contamination in the soil and groundwater is being managed under a Site Managment Plan. |
| Health Problem: | Direct contact with residual contaminants in soil is not expected because the site has been covered with pavement, a building and two feet of clean soil in green areas. Exposure to site related contaminants in drinking water is not expected since homes and businesses near the site are connected to public water. Soil vapor intrusion in future buildings is not expected because volatile organic compounds are not a site related contaminant. An environmental easement will restrict the use of groundwater, require implementation of a site management plan and periodic certification that the remedy remains in place and is effective. |
| Dump: | False |
| Structure: | False |
| Lagoon: | False |
| Landfill: | False |
| Pond: | False |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | 40.9263N / 73.9009W |
| Dell: | False |
| Record Add: | 2004-08-04 08:36:00 |
| Record Upd: | 2009-06-10 14:00:00 |
| Updated By: | THKNIZEK |
| Own Op: | 6 |
| Sub Type: | 09 |
| Owner Name: | Mr. Tommy Conneally |
| Owner Company: | 185 Riverdale Avenue LLC |
| Owner Address: | 185 Riverdale Avenue |
| Owner Addr2: | Suite 101 |
| Owner City,St,Zip: | Yonkers, NY 10705 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | 06 |
| Owner Name: | Mr. Tommy Conneally |
| Owner Company: | 185 Riverdale Avenue LLC |
| Owner Address: | 185 Riverdale Avenue |
| Owner Addr2: | Suite 101 |

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

Owner City,St,Zip: Yonkers, NY 10701
Owner Country: United States of America
Own Op: 6
Sub Type: 09
Owner Name: Mr. Tommy Conneally
Owner Company: Cottage International Development Group
Owner Address: 185 Riverdale Avenue
Owner Addr2: Suite 101
Owner City,St,Zip: Yonkers, NY 10705
Owner Country: United States of America
HW Code: C360074
Waste Type: LEAD
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: MERCURY
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: benzo(k)fluoranthene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CADMIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CHROMIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: COPPER
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: NICKEL
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: ZINC
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: ARSENIC
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BARIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CALCIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: IRON
Waste Quantity: UNKNOWN

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

Waste Code: Not reported
HW Code: C360074
Waste Type: BENZ(A)ANTHRACENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO(B)FLUORANTHENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO(A)PYRENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO[K]FLUORANTHENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: benzo(a)anthracene
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: w3-1039-05-01
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2009-06-01 15:05:00
Record Updated: 2009-06-01 15:05:00
Updated By: THKNIZEK

Name: 185 - 187 RIVERDALE AVE.
Address: 185 RIVERDALE AVENUE
City,State,Zip: YONKERS, NY 10701
Site Code: 59028
Control Name: Landuse Restriction
HW Code: C360074
Control Code: 25
Control Type: INST
Dt record added: 11/02/2006
Dt rec updated: 08/29/2023
Updated By: ARMALAME
Site Code: 59028
Site Description: Location: The site is located in an urban and industrial portion of Westchester County, NY. The site is 0.850 acres and approximately one mile south from the downtown area of Yonkers. Site Features: The site is bordered to the north by an undeveloped property and Highland Avenue; to the east by Riverdale Avenue and residential apartment buildings; to the south by a commercial building and an auto body repair shop; and to the west by multi-family residences located along Hawthorne Avenue. Current Zoning and Land Use: The site has been developed as a multi-story senior housing complex, and zoned commercial. Past Use of the Site: Prior uses that led to site contamination include a former automobile dismantling yard, junkyard, machine shop, and commercial laundry service. Site Geology and Hydrogeology: Groundwater flow is towards the west. Depth to groundwater was approximately 6 feet below ground surface (bgs). Bedrock was encountered at 32 and 42.5 feet bgs.
Env Problem: Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were naphthalene, fluoranthene,

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

| | |
|---|---|
| | phenanthrene, chrysene, pyrene, PCBs, arsenic, barium, chromium, and lead in the soil and groundwater. Residual contamination in the soil and groundwater is being managed under a Site Managment Plan. |
| Health Problem: | Direct contact with residual contaminants in soil is not expected because the site has been covered with pavement, a building and two feet of clean soil in green areas. Exposure to site related contaminants in drinking water is not expected since homes and businesses near the site are connected to public water. Soil vapor intrusion in future buildings is not expected because volatile organic compounds are not a site related contaminant. An environmental easement will restrict the use of groundwater, require implementation of a site management plan and periodic certification that the remedy remains in place and is effective. |
| Dump: | False |
| Structure: | False |
| Lagoon: | False |
| Landfill: | False |
| Pond: | False |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | 40.9263N / 73.9009W |
| Dell: | False |
| Record Add: | 2004-08-04 08:36:00 |
| Record Upd: | 2009-06-10 14:00:00 |
| Updated By: | THKNIZEK |
| Own Op: | 6 |
| Sub Type: | 09 |
| Owner Name: | Mr. Tommy Conneally |
| Owner Company: | 185 Riverdale Avenue LLC |
| Owner Address: | 185 Riverdale Avenue |
| Owner Addr2: | Suite 101 |
| Owner City,St,Zip: | Yonkers, NY 10705 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | 06 |
| Owner Name: | Mr. Tommy Conneally |
| Owner Company: | 185 Riverdale Avenue LLC |
| Owner Address: | 185 Riverdale Avenue |
| Owner Addr2: | Suite 101 |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | 6 |
| Sub Type: | 09 |
| Owner Name: | Mr. Tommy Conneally |
| Owner Company: | Cottage International Development Group |
| Owner Address: | 185 Riverdale Avenue |
| Owner Addr2: | Suite 101 |
| Owner City,St,Zip: | Yonkers, NY 10705 |
| Owner Country: | United States of America |
| HW Code: | C360074 |
| Waste Type: | LEAD |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | MERCURY |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

HW Code: C360074
Waste Type: benzo(k)fluoranthene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CADMIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CHROMIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: COPPER
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: NICKEL
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: ZINC
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: ARSENIC
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BARIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CALCIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: IRON
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZ(A)ANTHRACENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO(B)FLUORANTHENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO(A)PYRENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO[K]FLUORANTHENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

Waste Type: benzo(a)anthracene
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: w3-1039-05-01
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2009-06-01 15:05:00
Record Updated: 2009-06-01 15:05:00
Updated By: THKNIZEK

Name: 185 - 187 RIVERDALE AVE.
Address: 185 RIVERDALE AVENUE
City,State,Zip: YONKERS, NY 10701
Site Code: 59028
Control Name: Environmental Easement
HW Code: C360074
Control Code: J
Control Type: INST
Dt record added: 11/02/2006
Dt rec updated: 08/29/2023
Updated By: ARMALAME
Site Code: 59028
Site Description: Location: The site is located in an urban and industrial portion of Westchester County, NY. The site is 0.850 acres and approximately one mile south from the downtown area of Yonkers. Site Features: The site is bordered to the north by an undeveloped property and Highland Avenue; to the east by Riverdale Avenue and residential apartment buildings; to the south by a commercial building and an auto body repair shop; and to the west by multi-family residences located along Hawthorne Avenue. Current Zoning and Land Use: The site has been developed as a multi-story senior housing complex, and zoned commercial. Past Use of the Site: Prior uses that led to site contamination include a former automobile dismantling yard, junkyard, machine shop, and commercial laundry service. Site Geology and Hydrogeology: Groundwater flow is towards the west. Depth to groundwater was approximately 6 feet below ground surface (bgs). Bedrock was encountered at 32 and 42.5 feet bgs.
Env Problem: Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were naphthalene, fluoranthene, phenanthrene, chrysene, pyrene, PCBs, arsenic, barium, chromium, and lead in the soil and groundwater. Residual contamination in the soil and groundwater is being managed under a Site Managment Plan.
Health Problem: Direct contact with residual contaminants in soil is not expected because the site has been covered with pavement, a building and two feet of clean soil in green areas. Exposure to site related contaminants in drinking water is not expected since homes and businesses near the site are connected to public water. Soil vapor intrusion in future buildings is not expected because volatile organic compounds are not a site related contaminant. An environmental easement will restrict the use of groundwater, require implementation of a site management plan and periodic certification that the remedy remains in place and is effective.
Dump: False
Structure: False
Lagoon: False
Landfill: False
Pond: False

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

Disp Start: Not reported
Disp Term: Not reported
Lat/Long: 40.9263N / 73.9009W
Dell: False
Record Add: 2004-08-04 08:36:00
Record Upd: 2009-06-10 14:00:00
Updated By: THKNIZEK
Own Op: 6
Sub Type: 09
Owner Name: Mr. Tommy Conneally
Owner Company: 185 Riverdale Avenue LLC
Owner Address: 185 Riverdale Avenue
Owner Addr2: Suite 101
Owner City,St,Zip: Yonkers, NY 10705
Owner Country: United States of America
Own Op: 1
Sub Type: 06
Owner Name: Mr. Tommy Conneally
Owner Company: 185 Riverdale Avenue LLC
Owner Address: 185 Riverdale Avenue
Owner Addr2: Suite 101
Owner City,St,Zip: Yonkers, NY 10701
Owner Country: United States of America
Own Op: 6
Sub Type: 09
Owner Name: Mr. Tommy Conneally
Owner Company: Cottage International Development Group
Owner Address: 185 Riverdale Avenue
Owner Addr2: Suite 101
Owner City,St,Zip: Yonkers, NY 10705
Owner Country: United States of America
HW Code: C360074
Waste Type: LEAD
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: MERCURY
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: benzo(k)fluoranthene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CADMIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CHROMIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: COPPER
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: NICKEL

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: ZINC
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: ARSENIC
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BARIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CALCIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: IRON
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZ(A)ANTHRACENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO(B)FLUORANTHENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO(A)PYRENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO[K]FLUORANTHENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: benzo(a)anthracene
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: w3-1039-05-01
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2009-06-01 15:05:00
Record Updated: 2009-06-01 15:05:00
Updated By: THKNIZEK

Name: 185 - 187 RIVERDALE AVE.
Address: 185 RIVERDALE AVENUE
City,State,Zip: YONKERS, NY 10701
Site Code: 59028
Control Name: Soil Management Plan
HW Code: C360074
Control Code: 14
Control Type: INST

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

| | |
|---|---|
| Dt record added: | 11/02/2006 |
| Dt rec updated: | 08/29/2023 |
| Updated By: | ARMALAME |
| Site Code: | 59028 |
| Site Description: | Location: The site is located in an urban and industrial portion of Westchester County, NY. The site is 0.850 acres and approximately one mile south from the downtown area of Yonkers. Site Features: The site is bordered to the north by an undeveloped property and Highland Avenue; to the east by Riverdale Avenue and residential apartment buildings; to the south by a commercial building and an auto body repair shop; and to the west by multi-family residences located along Hawthorne Avenue. Current Zoning and Land Use: The site has been developed as a multi-story senior housing complex, and zoned commercial. Past Use of the Site: Prior uses that led to site contamination include a former automobile dismantling yard, junkyard, machine shop, and commercial laundry service. Site Geology and Hydrogeology: Groundwater flow is towards the west. Depth to groundwater was approximately 6 feet below ground surface (bgs). Bedrock was encountered at 32 and 42.5 feet bgs. |
| Env Problem: | Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were naphthalene, fluoranthene, phenanthrene, chrysene, pyrene, PCBs, arsenic, barium, chromium, and lead in the soil and groundwater. Residual contamination in the soil and groundwater is being managed under a Site Managment Plan. |
| Health Problem: | Direct contact with residual contaminants in soil is not expected because the site has been covered with pavement, a building and two feet of clean soil in green areas. Exposure to site related contaminants in drinking water is not expected since homes and businesses near the site are connected to public water. Soil vapor intrusion in future buildings is not expected because volatile organic compounds are not a site related contaminant. An environmental easement will restrict the use of groundwater, require implementation of a site management plan and periodic certification that the remedy remains in place and is effective. |
| Dump: | False |
| Structure: | False |
| Lagoon: | False |
| Landfill: | False |
| Pond: | False |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | 40.9263N / 73.9009W |
| Dell: | False |
| Record Add: | 2004-08-04 08:36:00 |
| Record Upd: | 2009-06-10 14:00:00 |
| Updated By: | THKNIZEK |
| Own Op: | 6 |
| Sub Type: | 09 |
| Owner Name: | Mr. Tommy Conneally |
| Owner Company: | 185 Riverdale Avenue LLC |
| Owner Address: | 185 Riverdale Avenue |
| Owner Addr2: | Suite 101 |
| Owner City,St,Zip: | Yonkers, NY 10705 |
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | 06 |
| Owner Name: | Mr. Tommy Conneally |

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

Owner Company: 185 Riverdale Avenue LLC
Owner Address: 185 Riverdale Avenue
Owner Addr2: Suite 101
Owner City,St,Zip: Yonkers, NY 10701
Owner Country: United States of America
Own Op: 6
Sub Type: 09
Owner Name: Mr. Tommy Conneally
Owner Company: Cottage International Development Group
Owner Address: 185 Riverdale Avenue
Owner Addr2: Suite 101
Owner City,St,Zip: Yonkers, NY 10705
Owner Country: United States of America
HW Code: C360074
Waste Type: LEAD
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: MERCURY
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: benzo(k)fluoranthene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CADMIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CHROMIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: COPPER
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: NICKEL
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: ZINC
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: ARSENIC
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BARIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CALCIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

HW Code: C360074
Waste Type: IRON
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZ(A)ANTHRACENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO(B)FLUORANTHENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO(A)PYRENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO[K]FLUORANTHENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: benzo(a)anthracene
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: w3-1039-05-01
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2009-06-01 15:05:00
Record Updated: 2009-06-01 15:05:00
Updated By: THKNIZEK

Name: 185 - 187 RIVERDALE AVE.
Address: 185 RIVERDALE AVENUE
City,State,Zip: YONKERS, NY 10701
Site Code: 59028
Control Name: Ground Water Use Restriction
HW Code: C360074
Control Code: 08
Control Type: INST
Dt record added: 11/02/2006
Dt rec updated: 08/29/2023
Updated By: ARMALAME
Site Code: 59028
Site Description: Location: The site is located in an urban and industrial portion of Westchester County, NY. The site is 0.850 acres and approximately one mile south from the downtown area of Yonkers. Site Features: The site is bordered to the north by an undeveloped property and Highland Avenue; to the east by Riverdale Avenue and residential apartment buildings; to the south by a commercial building and an auto body repair shop; and to the west by multi-family residences located along Hawthorne Avenue. Current Zoning and Land Use: The site has been developed as a multi-story senior housing complex, and zoned commercial. Past Use of the Site: Prior uses that led to site contamination include a former automobile dismantling yard, junkyard, machine shop, and commercial laundry service. Site Geology and Hydrogeology: Groundwater flow is towards the west. Depth to groundwater was approximately 6 feet below ground surface (bgs).

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

Bedrock was encountered at 32 and 42.5 feet bgs.
Env Problem: Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were naphthalene, fluoranthene, phenanthrene, chrysene, pyrene, PCBs, arsenic, barium, chromium, and lead in the soil and groundwater. Residual contamination in the soil and groundwater is being managed under a Site Managment Plan.
Health Problem: Direct contact with residual contaminants in soil is not expected because the site has been covered with pavement, a building and two feet of clean soil in green areas. Exposure to site related contaminants in drinking water is not expected since homes and businesses near the site are connected to public water. Soil vapor intrusion in future buildings is not expected because volatile organic compounds are not a site related contaminant. An environmental easement will restrict the use of groundwater, require implementation of a site management plan and periodic certification that the remedy remains in place and is effective.
Dump: False
Structure: False
Lagoon: False
Landfill: False
Pond: False
Disp Start: Not reported
Disp Term: Not reported
Lat/Long: 40.9263N / 73.9009W
Dell: False
Record Add: 2004-08-04 08:36:00
Record Upd: 2009-06-10 14:00:00
Updated By: THKNIZEK
Own Op: 6
Sub Type: 09
Owner Name: Mr. Tommy Conneally
Owner Company: 185 Riverdale Avenue LLC
Owner Address: 185 Riverdale Avenue
Owner Addr2: Suite 101
Owner City,St,Zip: Yonkers, NY 10705
Owner Country: United States of America
Own Op: 1
Sub Type: 06
Owner Name: Mr. Tommy Conneally
Owner Company: 185 Riverdale Avenue LLC
Owner Address: 185 Riverdale Avenue
Owner Addr2: Suite 101
Owner City,St,Zip: Yonkers, NY 10701
Owner Country: United States of America
Own Op: 6
Sub Type: 09
Owner Name: Mr. Tommy Conneally
Owner Company: Cottage International Development Group
Owner Address: 185 Riverdale Avenue
Owner Addr2: Suite 101
Owner City,St,Zip: Yonkers, NY 10705
Owner Country: United States of America
HW Code: C360074
Waste Type: LEAD
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

Waste Type: MERCURY
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: benzo(k)fluoranthene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CADMIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CHROMIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: COPPER
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: NICKEL
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: ZINC
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: ARSENIC
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BARIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CALCIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: IRON
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZ(A)ANTHRACENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO(B)FLUORANTHENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO(A)PYRENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO[K]FLUORANTHENE

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: benzo(a)anthracene
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: w3-1039-05-01
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2009-06-01 15:05:00
Record Updated: 2009-06-01 15:05:00
Updated By: THKNIZEK

Name: 185 - 187 RIVERDALE AVE.
Address: 185 RIVERDALE AVENUE
City,State,Zip: YONKERS, NY 10701
Site Code: 59028
Control Name: Site Management Plan
HW Code: C360074
Control Code: 32
Control Type: INST
Dt record added: 11/02/2006
Dt rec updated: 08/29/2023
Updated By: ARMALAME
Site Code: 59028
Site Description: Location: The site is located in an urban and industrial portion of Westchester County, NY. The site is 0.850 acres and approximately one mile south from the downtown area of Yonkers. Site Features: The site is bordered to the north by an undeveloped property and Highland Avenue; to the east by Riverdale Avenue and residential apartment buildings; to the south by a commercial building and an auto body repair shop; and to the west by multi-family residences located along Hawthorne Avenue. Current Zoning and Land Use: The site has been developed as a multi-story senior housing complex, and zoned commercial. Past Use of the Site: Prior uses that led to site contamination include a former automobile dismantling yard, junkyard, machine shop, and commercial laundry service. Site Geology and Hydrogeology: Groundwater flow is towards the west. Depth to groundwater was approximately 6 feet below ground surface (bgs). Bedrock was encountered at 32 and 42.5 feet bgs.
Env Problem: Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were naphthalene, fluoranthene, phenanthrene, chrysene, pyrene, PCBs, arsenic, barium, chromium, and lead in the soil and groundwater. Residual contamination in the soil and groundwater is being managed under a Site Managment Plan.
Health Problem: Direct contact with residual contaminants in soil is not expected because the site has been covered with pavement, a building and two feet of clean soil in green areas. Exposure to site related contaminants in drinking water is not expected since homes and businesses near the site are connected to public water. Soil vapor intrusion in future buildings is not expected because volatile organic compounds are not a site related contaminant. An environmental easement will restrict the use of groundwater, require implementation of a site management plan and periodic certification that the remedy remains in place and is effective.
Dump: False
Structure: False

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

Lagoon: False
Landfill: False
Pond: False
Disp Start: Not reported
Disp Term: Not reported
Lat/Long: 40.9263N / 73.9009W
Dell: False
Record Add: 2004-08-04 08:36:00
Record Upd: 2009-06-10 14:00:00
Updated By: THKNIZEK
Own Op: 6
Sub Type: 09
Owner Name: Mr. Tommy Conneally
Owner Company: 185 Riverdale Avenue LLC
Owner Address: 185 Riverdale Avenue
Owner Addr2: Suite 101
Owner City,St,Zip: Yonkers, NY 10705
Owner Country: United States of America
Own Op: 1
Sub Type: 06
Owner Name: Mr. Tommy Conneally
Owner Company: 185 Riverdale Avenue LLC
Owner Address: 185 Riverdale Avenue
Owner Addr2: Suite 101
Owner City,St,Zip: Yonkers, NY 10701
Owner Country: United States of America
Own Op: 6
Sub Type: 09
Owner Name: Mr. Tommy Conneally
Owner Company: Cottage International Development Group
Owner Address: 185 Riverdale Avenue
Owner Addr2: Suite 101
Owner City,St,Zip: Yonkers, NY 10705
Owner Country: United States of America
HW Code: C360074
Waste Type: LEAD
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: MERCURY
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: benzo(k)fluoranthene
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CADMIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CHROMIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: COPPER
Waste Quantity: UNKNOWN

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

Waste Code: Not reported
HW Code: C360074
Waste Type: NICKEL
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: ZINC
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: ARSENIC
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BARIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: CALCIUM
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: IRON
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZ(A)ANTHRACENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO(B)FLUORANTHENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO(A)PYRENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: BENZO[K]FLUORANTHENE
Waste Quantity: UNKNOWN
Waste Code: Not reported
HW Code: C360074
Waste Type: benzo(a)anthracene
Waste Quantity: UNKNOWN
Waste Code: Not reported
Crossref ID: w3-1039-05-01
Cross Ref Type Code: 23
Cross Ref Type: Agreement/Consent Order Number
Record Added Date: 2009-06-01 15:05:00
Record Updated: 2009-06-01 15:05:00
Updated By: THKNIZEK

BROWNFIELDS:
Name: 185 - 187 RIVERDALE AVE.
Address: 185 RIVERDALE AVENUE
City,State,Zip: YONKERS, NY 10701
Program: BCP

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

| | |
|---|---|
| Site Code: | 59028 |
| Acres: | 0.850 |
| HW Code: | C360074 |
| SWIS: | 6018 |
| Town: | Yonkers (c) |
| Record Added Date: | 08/04/2004 |
| Record Updated Date: | 08/24/2023 |
| Update By: | SXDEYETT |
| Site Description: | Location: The site is located in an urban and industrial portion of Westchester County, NY. The site is 0.850 acres and approximately one mile south from the downtown area of Yonkers. Site Features: The site is bordered to the north by an undeveloped property and Highland Avenue; to the east by Riverdale Avenue and residential apartment buildings; to the south by a commercial building and an auto body repair shop; and to the west by multi-family residences located along Hawthorne Avenue. Current Zoning and Land Use: The site has been developed as a multi-story senior housing complex, and zoned commercial. Past Use of the Site: Prior uses that led to site contamination include a former automobile dismantling yard, junkyard, machine shop, and commercial laundry service. Site Geology and Hydrogeology: Groundwater flow is towards the west. Depth to groundwater was approximately 6 feet below ground surface (bgs). Bedrock was encountered at 32 and 42.5 feet bgs. |
| Env Problem: | Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were naphthalene, fluoranthene, phenanthrene, chrysene, pyrene, PCBs, arsenic, barium, chromium, and lead in the soil and groundwater. Residual contamination in the soil and groundwater is being managed under a Site Managment Plan. |
| Health Problem: | Direct contact with residual contaminants in soil is not expected because the site has been covered with pavement, a building and two feet of clean soil in green areas. Exposure to site related contaminants in drinking water is not expected since homes and businesses near the site are connected to public water. Soil vapor intrusion in future buildings is not expected because volatile organic compounds are not a site related contaminant. An environmental easement will restrict the use of groundwater, require implementation of a site management plan and periodic certification that the remedy remains in place and is effective. |
| Dump: | False |
| Structure: | False |
| Lagoon: | False |
| Landfill: | False |
| Pond: | False |
| Disp Start: | Not reported |
| Disp Term: | Not reported |
| Lat/Long: | 40.9263N / 73.9009W |
| Dell: | False |
| Record Add: | 2004-08-04 08:36:00 |
| Record Upd: | 2009-06-10 14:00:00 |
| Updated By: | THKNIZEK |
| Own Op: | 6 |
| Sub Type: | 09 |
| Owner Name: | Mr. Tommy Conneally |
| Owner Company: | 185 Riverdale Avenue LLC |
| Owner Address: | 185 Riverdale Avenue |
| Owner Addr2: | Suite 101 |
| Owner City,St,Zip: | Yonkers, NY 10705 |

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

| | |
|---|---|
| Owner Country: | United States of America |
| Own Op: | 1 |
| Sub Type: | 06 |
| Owner Name: | Mr. Tommy Conneally |
| Owner Company: | 185 Riverdale Avenue LLC |
| Owner Address: | 185 Riverdale Avenue |
| Owner Addr2: | Suite 101 |
| Owner City,St,Zip: | Yonkers, NY 10701 |
| Owner Country: | United States of America |
| Own Op: | 6 |
| Sub Type: | 09 |
| Owner Name: | Mr. Tommy Conneally |
| Owner Company: | Cottage International Development Group |
| Owner Address: | 185 Riverdale Avenue |
| Owner Addr2: | Suite 101 |
| Owner City,St,Zip: | Yonkers, NY 10705 |
| Owner Country: | United States of America |
| HW Code: | C360074 |
| Waste Type: | LEAD |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | MERCURY |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | benzo(k)fluoranthene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | CADMIUM |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | CHROMIUM |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | COPPER |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | NICKEL |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | ZINC |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | ARSENIC |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | BARIUM |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

| | |
|---|---|
| HW Code: | C360074 |
| Waste Type: | CALCIUM |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | IRON |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | BENZ(A)ANTHRACENE |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | BENZO(B)FLUORANTHENE |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | BENZO(A)PYRENE |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | BENZO[K]FLUORANTHENE |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| HW Code: | C360074 |
| Waste Type: | benzo(a)anthracene |
| Waste Quantity: | UNKNOWN |
| Waste Code: | Not reported |
| Crossref ID: | w3-1039-05-01 |
| Cross Ref Type Code: | 23 |
| Cross Ref Type: | Agreement/Consent Order Number |
| Record Added Date: | 2009-06-01 15:05:00 |
| Record Updated: | 2009-06-01 15:05:00 |
| Updated By: | THKNIZEK |

SPILLS:

| | |
|---|---|
| Name: | 185 RIVERDALE AVE |
| Address: | 185 RIVERDALE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0311496 / 2006-12-27 |
| Facility ID: | 0311496 |
| Facility Type: | ER |
| DER Facility ID: | 146817 |
| Site ID: | 174592 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | B3 |
| SWIS: | 6018 |
| Spill Date: | 2004-01-12 |
| Investigator: | TDGHIOSA |
| Referred To: | WESTCHESTER CNTY HEALTH DEPT |
| Reported to Dept: | 2004-01-12 |
| CID: | 403 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Health Department |
| Cleanup Ceased: | Not reported |

**185 - 187 RIVERDALE AVE. (Continued)** **S106123955**

| | |
|---|---|
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2004-01-12 |
| Spill Record Last Update: | 2008-12-09 |
| Spiller Name: | STEFAN GOREAU |
| Spiller Company: | LEONARD NERMELSTEIN |
| Spiller Address: | 1885 47TH ST |
| Spiller Company: | 001 |
| Contact Name: | STEFAN GOREAU |
| Latitude: | 40.9264796 |
| Longitude: | -73.9010359 |
| DEC Memo: | 12/27/2006 Spill remediated as part of remedial program for Brownfield Cleanup Program Site C3600074 - 185-187 Riverdale - PM - M. Hubicki. Brownsfield project being handled under Spill 05-04471. jod |
| Remarks: | THE TANK HAS HOLES IN IT AND IS LEAKING OUT #2 FUEL OIL. THE SPILL HAS PROBABLY BEEN GOING ON FOR A WHILE. IT IS CONTAMINATING THE SOIL AROUND THE TANK |

All Materials:

| | |
|---|---|
| Site ID: | 174592 |
| Operable Unit ID: | 879101 |
| Operable Unit: | 01 |
| Material ID: | 500300 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**BC324** **YOUNG ADULT INSTITUTE** **NY LTANKS** **S106719086**
**NE** **1 ROSE LANE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.463 mi.**
**2446 ft.** **Site 2 of 2 in cluster BC**

**Relative:**
**Higher**

**Actual:**
**269 ft.**

LTANKS:

| | |
|---|---|
| Name: | YOUNG ADULT INSTITUTE |
| Address: | 1 ROSE LANE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0300812 / 2003-10-21 |
| Facility ID: | 0300812 |
| Site ID: | 147648 |
| Spill Date: | 2003-04-23 |
| Spill Cause: | Tank Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |

**YOUNG ADULT INSTITUTE (Continued)** **S106719086**

| | |
|---|---|
| Referred To: | Not reported |
| Reported to Dept: | 2003-04-23 |
| CID: | 281 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2003-04-23 |
| Spill Record Last Update: | 2003-10-21 |
| Spiller Name: | DOUG WRIGHT |
| Spiller Company: | SAME |
| Spiller Address: | Not reported |
| Spiller County: | 001 |
| Spiller Contact: | ANDY CALDERONE |
| Spiller Phone: | (914) 906-5416 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 125694 |
| Latitude: | 40.9243073 |
| Longitude: | -73.8933640 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'DEE 10/21/03 ENVIROGUIDE DISPOSED OF LUST AND 24.30 TONS OF CONTAMINATED SOIL. NFA |
| Remarks: | Soil contamination and possible ground water contamination discovered after tank removal at above location. Area to be excavated and further testing to be done. |

All Materials:

| | |
|---|---|
| Site ID: | 147648 |
| Operable Unit ID: | 867182 |
| Operable Unit: | 01 |
| Material ID: | 508885 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**BD325** **MCGWYNE - TTF** **NY LTANKS** **S119030011**
**ESE** **497 VAN CORTLANDT PARK AVE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.465 mi.**
**2454 ft.** **Site 2 of 2 in cluster BD**

**Relative:** **Higher**

**Actual:** **85 ft.**

LTANKS:

| | |
|---|---|
| Name: | APARTMENT BUILDING TTF |
| Address: | 497 VAN CORTLANDT AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1809816 / 2022-03-31 |
| Facility ID: | 1809816 |
| Site ID: | 580682 |

**MCGWYNE - TTF (Continued)** **S119030011**

| | |
|---|---|
| Spill Date: | 2018-12-21 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JPCUMMIN |
| Referred To: | Not reported |
| Reported to Dept: | 2018-12-21 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Health Department |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2018-12-21 |
| Spill Record Last Update: | 2022-03-31 |
| Spiller Name: | Gerry McGwyne |
| Spiller Company: | Apartment Bldg |
| Spiller Address: | 497 VAN CORTLANDT AVE |
| Spiller County: | 999 |
| Spiller Contact: | CHRIS LALAK |
| Spiller Phone: | (914) 813-7304 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 533279 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 12/21/18: Previously reported open TTF Spill on this property is 1609924. WCDoH will followup. jod 12/24/18: I spoke with Chris Lalak at WCDoH PBS. This is a 2k gallon UST under the sidewalk. Tank failed a tightness test performed by Paul Scorzelli of Accurate Tank testing on Dec 12th. Paul did not report the spill. Gerry McGwyne is the property owner. Mr Mcgwyne purchased the property about two years ago and registered the UST at that time. WCDoH PBS database shows passing tests 4-4-17 and 4-4-18. Chris states he sees no record of the former Jan 2017 TTF in PBS or in the County spills log. The owner currently wishes to investigate further and not replace the tank. WCDoH will follow up. jod 11/24/21 Chris Lalak requested closure of the spill based on the tank being removed by Castlton. NFA. TG |
| Remarks: | unknown id repair and retest side note tested did not report spill |

All Materials:

| | |
|---|---|
| Site ID: | 580682 |
| Operable Unit ID: | 1328387 |
| Operable Unit: | 01 |
| Material ID: | 2337376 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

**MCGWYNE - TTF (Continued)** **S119030011**

| | |
|---|---|
| Name: | MCGWYNE - TTF |
| Address: | 497 VAN CORTLANDT PARK AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1609924 / 2018-12-24 |
| Facility ID: | 1609924 |
| Site ID: | 538738 |
| Spill Date: | 2017-01-27 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D5 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2017-01-29 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2017-01-29 |
| Spill Record Last Update: | 2018-12-24 |
| Spiller Name: | GERRY MCGWYNE |
| Spiller Company: | Gerry McGwyne |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | GERRY MCGWYNE |
| Spiller Phone: | (917) 416-7980 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 492535 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 1-29-17 Called and left message with Reed requesting call back to 3121 for more details. jc 1-30-17 Called and left message with Gerry requesting call back to 3121. jc 12/21/18: Spill 1809816 reported by Chris Lalak of WCDoH for this property. Possible second TTF. jod 12/24/18: WCDoH PBS records indicate passing tightness tests in April of 2017 and April of 2018. UST failed a tightness test Dec 12, 2018. WCDoH following up, NFA this spill number, referred to Spill 1809816. jod |
| Remarks: | soil sample taken had an odor |

All TTF:

| | |
|---|---|
| Facility ID: | 1609924 |
| Spill Number: | 1609924 |
| Spill Tank Test: | 2506414 |
| Site ID: | 538738 |
| Tank Number: | UST |
| Tank Size: | 2000 |
| Material: | 0001 |
| EPA UST: | False |
| UST: | True |
| Cause: | 99 |
| Source: | 00 |

**MCGWYNE - TTF (Continued)** **S119030011**

Test Method: -
Test Method 2: Not reported
Leak Rate: Not reported
Gross Fail: Not reported
Modified By: JBODEE
Last Modified Date: Not reported

All Materials:
Site ID: 538738
Operable Unit ID: 1287318
Operable Unit: 01
Material ID: 2293023
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: Not reported
Recovered: Not reported
Oxygenate: Not reported

---

**326**
**NNE**
**1/4-1/2**
**0.470 mi.**
**2483 ft.**

**RIVERVIEW GARDEN COURT** **NY LTANKS** **S102674381**
**100 HIGHLAND AVE** **N/A**
**YONKERS, NY**

**Relative: Higher**

**Actual: 137 ft.**

LTANKS:
Name: RIVERVIEW GARDEN COURT
Address: 100 HIGHLAND AVE
City,State,Zip: YONKERS, NY
Spill Number/Closed Date: 9413381 / 1995-01-19
Facility ID: 9413381
Site ID: 287788
Spill Date: 1995-01-07
Spill Cause: Tank Overfill
Spill Source: Commercial Vehicle
Spill Class: C3
Cleanup Ceased: 1995-01-19
SWIS: 6018
Investigator: tdghiosa
Referred To: Not reported
Reported to Dept: 1995-01-07
CID: Not reported
Water Affected: Not reported
Spill Notifier: Responsible Party
Last Inspection: Not reported
Recommended Penalty: False
Meets Standard: False
UST Involvement: False
Remediation Phase: 0
Date Entered In Computer: 2003-12-02
Spill Record Last Update: 2003-12-02
Spiller Name: Not reported
Spiller Company: CASTLE OIL
Spiller Address: Not reported

**RIVERVIEW GARDEN COURT (Continued)** **S102674381**

| | |
|---|---|
| Spiller County: | 999 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 233106 |
| Latitude: | 40.9261195 |
| Longitude: | -73.8991772 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | STORAGE TANK OVERFILL ENTERED C/B BUT CONTAINED IN C/B CLEAN UP COMPLETED BY CASTLE OIL |

All Materials:

| | |
|---|---|
| Site ID: | 287788 |
| Operable Unit ID: | 1010941 |
| Operable Unit: | 01 |
| Material ID: | 372119 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 10.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**BE327** **ST. DENNIS SCHOOL** **NY LTANKS S103828243**
**ESE** **73 LAWRENCE STREET** **NY Spills N/A**
**1/4-1/2** **YONKERS, NY**
**0.472 mi.**
**2493 ft.** **Site 1 of 2 in cluster BE**

**Relative:** **Higher**
**Actual:** **83 ft.**

LTANKS:

| | |
|---|---|
| Name: | CHURCH OF ST DENNIS |
| Address: | 73 LAWRENCE ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0209828 / 2002-12-27 |
| Facility ID: | 0209828 |
| Site ID: | 318693 |
| Spill Date: | 2002-12-27 |
| Spill Cause: | Tank Overfill |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2002-12-27 |
| CID: | 211 |
| Water Affected: | Not reported |
| Spill Notifier: | Responsible Party |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |

**ST. DENNIS SCHOOL (Continued)** **S103828243**

| | |
|---|---|
| Date Entered In Computer: | 2002-12-27 |
| Spill Record Last Update: | 2003-01-03 |
| Spiller Name: | Not reported |
| Spiller Company: | CASTLE OIL |
| Spiller Address: | Not reported |
| Spiller County: | 001 |
| Spiller Contact: | ROBERT HILL |
| Spiller Phone: | (718) 579-3414 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 256901 |
| Latitude: | 40.9166077 |
| Longitude: | -73.8917349 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'DEE |
| Remarks: | product came out vent - clean up crew on site |

All Materials:

| | |
|---|---|
| Site ID: | 318693 |
| Operable Unit ID: | 861062 |
| Operable Unit: | 01 |
| Material ID: | 513248 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 15.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | ST. DENNIS SCHOOL |
| Address: | 73 LAWRENCE STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9009734 / 1991-04-23 |
| Facility ID: | 9009734 |
| Facility Type: | ER |
| DER Facility ID: | 199772 |
| Site ID: | 243192 |
| DEC Region: | 3 |
| Spill Cause: | Human Error |
| Spill Class: | Not reported |
| SWIS: | 6018 |
| Spill Date: | 1990-12-07 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1990-12-07 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Tank Truck |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | 1991-04-18 |
| Cleanup Meets Std: | True |
| Last Inspection: | 1991-04-18 |
| Recommended Penalty: | False |

**ST. DENNIS SCHOOL (Continued)** **S103828243**

| | |
|---|---|
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1990-12-13 |
| Spill Record Last Update: | 1991-04-23 |
| Spiller Name: | Not reported |
| Spiller Company: | CASTLE OIL |
| Spiller Address: | 290 LOCUST AVE. |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | 40.9166077 |
| Longitude: | -73.8917349 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY 04/23/91: ARLENE RESTO FROM WCHD SAID TANK WAS IN A VAULT, FREE PRODUCT WAS CLEANED UP, TANK IS WAITING TO BE REMOVED. |
| Remarks: | GUAGE NOT WORKING CONTAINED ON CONCRETE CASTLE OIL CLEANING UP |

All Materials:

| | |
|---|---|
| Site ID: | 243192 |
| Operable Unit ID: | 946770 |
| Operable Unit: | 01 |
| Material ID: | 429933 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 10.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | ST. DENNIS CHURCH |
| Address: | 73 LAWRENCE STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9300389 / 1993-04-08 |
| Facility ID: | 9300389 |
| Facility Type: | ER |
| DER Facility ID: | 199772 |
| Site ID: | 243193 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | D4 |
| SWIS: | 6018 |
| Spill Date: | 1993-04-08 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1993-04-08 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | 1993-04-08 |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |

**ST. DENNIS SCHOOL (Continued)** **S103828243**

| | |
|---|---|
| Date Entered In Computer: | 1993-04-08 |
| Spill Record Last Update: | 1993-04-14 |
| Spiller Name: | Not reported |
| Spiller Company: | SAME |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | Not reported |
| Latitude: | 40.9166077 |
| Longitude: | -73.8917349 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | DURING DELIVERY OIL BACKED OUT OF FILL PIPE TO CONCRETE SIDEWALK DRIVER APPLIED SPEEDI-DRI AND DISPOSED VENT CLOGGED SERVICEMAN TO REPAIR VENT |

All Materials:

| | |
|---|---|
| Site ID: | 243193 |
| Operable Unit ID: | 982297 |
| Operable Unit: | 01 |
| Material ID: | 401150 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 2.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | ST DENNIS SCHOOL |
| Address: | 73 LAWRENCE ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9813906 / 1999-02-16 |
| Facility ID: | 9813906 |
| Facility Type: | ER |
| DER Facility ID: | 256901 |
| Site ID: | 318694 |
| DEC Region: | 3 |
| Spill Cause: | Human Error |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 1999-02-16 |
| Investigator: | tdghiosa |
| Referred To: | Not reported |
| Reported to Dept: | 1999-02-16 |
| CID: | 252 |
| Water Affected: | Not reported |
| Spill Source: | Commercial Vehicle |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1999-02-16 |
| Spill Record Last Update: | 1999-02-18 |

**ST. DENNIS SCHOOL (Continued)** **S103828243**

| | |
|---|---|
| Spiller Name: | JIM CAREY |
| Spiller Company: | CASTLE OIL CORPORATION |
| Spiller Address: | 290 LOCUST AVENUE |
| Spiller Company: | 001 |
| Contact Name: | UNK |
| Latitude: | 40.9166077 |
| Longitude: | -73.8917349 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was GHIOSAY |
| Remarks: | DRIVER ERROR-STORAGE TANK WAS OVERFILLED-SPILL CREW ENROUTE FOR CLEANUP. |

All Materials:

| | |
|---|---|
| Site ID: | 318694 |
| Operable Unit ID: | 1071416 |
| Operable Unit: | 01 |
| Material ID: | 310617 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 5.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | CATHOLIC SCHOOL |
| Address: | 73 LAWRENCE STREET |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0903605 / 2009-09-10 |
| Facility ID: | 0903605 |
| Facility Type: | ER |
| DER Facility ID: | 199772 |
| Site ID: | 415723 |
| DEC Region: | 3 |
| Spill Cause: | Other |
| Spill Class: | C3 |
| SWIS: | 6018 |
| Spill Date: | 2009-06-26 |
| Investigator: | jbodee |
| Referred To: | Not reported |
| Reported to Dept: | 2009-06-26 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | 2009-06-29 |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2009-06-26 |
| Spill Record Last Update: | 2009-09-10 |
| Spiller Name: | Not reported |
| Spiller Company: | UNK |
| Spiller Address: | Not reported |

**ST. DENNIS SCHOOL (Continued)** **S103828243**

| | |
|---|---|
| Spiller Company: | 999 |
| Contact Name: | ARNIE TSCHANTRE |
| Latitude: | 40.9166153 |
| Longitude: | -73.8917731 |
| DEC Memo: | 6-29-09 Royal cleaned up on Saturday. School is closed down for the past couple of years. Sounds like there is a water problem as there was 4' of water in the basement and a few feet in the gym. Oil was from two five gallon buckets that had oil in them. They vac'ed out water and cleaned with absorbents. Arnie to submit a report. jc 9/10/09: Report received from Royal stating the clean up was completed. NFA required at this time. jod |
| Remarks: | Contained, sump pump not hooked up; 2 five gallons of heavy oil in 1 foot of water in boiler room and gym; clean up will take place tomorrow |

All Materials:

| | |
|---|---|
| Site ID: | 415723 |
| Operable Unit ID: | 1172053 |
| Operable Unit: | 01 |
| Material ID: | 2163905 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 10.00 |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**BF328** **APARTMENT BLDG** **NY LTANKS** **S107789553**
**SE** **80 SARATOGA AVE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.472 mi.**
**2493 ft.** **Site 1 of 3 in cluster BF**

**Relative:**
**Higher**

**Actual:**
**111 ft.**

LTANKS:

| | |
|---|---|
| Name: | APARTMENT BLDG |
| Address: | 80 SARATOGA AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 0602430 / 2006-07-30 |
| Facility ID: | 0602430 |
| Site ID: | 364905 |
| Spill Date: | 2006-06-02 |
| Spill Cause: | Tank Failure |
| Spill Source: | Non Major Facility > 1,100 gal |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODee |
| Referred To: | WCDOH |
| Reported to Dept: | 2006-06-02 |
| CID: | 406 |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |

**APARTMENT BLDG (Continued)** **S107789553**

| | |
|---|---|
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2006-06-02 |
| Spill Record Last Update: | 2006-07-30 |
| Spiller Name: | IMA |
| Spiller Company: | APARTMENT BLDG |
| Spiller Address: | 80 SARATOGA AVE. |
| Spiller County: | 001 |
| Spiller Contact: | IMA |
| Spiller Phone: | (917) 681-5785 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 315072 |
| Latitude: | 40.9148817 |
| Longitude: | -73.8932485 |
| DEC Memo: | PBS 3-800813 July 30, 2006: Tank passed a retest after piping was repaired. Based upon information provided to DEC, no further action is required at this time |
| Remarks: | Small hole in the tank but caller cannot see it. There's about 3 gallons on the floor with saw dust on it. AL Eastman and Sons was called to the site for clean up and assessment of the tank. |

All TTF:

| | |
|---|---|
| Facility ID: | 0602430 |
| Spill Number: | 0602430 |
| Spill Tank Test: | 1550032 |
| Site ID: | 364905 |
| Tank Number: | Not reported |
| Tank Size: | 1500 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 364905 |
| Operable Unit ID: | 1122918 |
| Operable Unit: | 01 |
| Material ID: | 2112398 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 3.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

**BE329** **LAWRENCE** **NY LTANKS** **S100140227**
**ESE** **73 ST** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.474 mi.**
**2501 ft.** **Site 2 of 2 in cluster BE**

**Relative:**
**Higher**

**Actual:**
**83 ft.**

LTANKS:

| | |
|---|---|
| Name: | LAWRENCE |
| Address: | 73 ST |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 8706940 / 1995-02-14 |
| Facility ID: | 8706940 |
| Site ID: | 111338 |
| Spill Date: | 1987-11-14 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | D4 |
| Cleanup Ceased: | 1995-02-14 |
| SWIS: | 6018 |
| Investigator: | dxtraver |
| Referred To: | Not reported |
| Reported to Dept: | 1987-11-14 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1987-11-18 |
| Spill Record Last Update: | 1995-02-14 |
| Spiller Name: | Not reported |
| Spiller Company: | ST. DENNIS ELEM. SCHOOL |
| Spiller Address: | Not reported |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 97383 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was TRAVER |
| Remarks: | WILL ISOLATE AND RETEST 5K TANK HIGH VOL. LEAK |

All TTF:

| | |
|---|---|
| Facility ID: | 8706940 |
| Spill Number: | 8706940 |
| Spill Tank Test: | 1532277 |
| Site ID: | 111338 |
| Tank Number: | Not reported |
| Tank Size: | 0 |
| Material: | 0003 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 00 |

**LAWRENCE (Continued)** **S100140227**

| | |
|---|---|
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 111338 |
| Operable Unit ID: | 912773 |
| Operable Unit: | 01 |
| Material ID: | 465925 |
| Material Code: | 0003A |
| Material Name: | #6 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | Not reported |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**BG330** **MOUNT SAINT VINCENT** **NY LTANKS** **U001835537**
**SSW** **6301 RIVERDALE AVENUE** **NY AST** **N/A**
**1/4-1/2** **NEW YORK, NY 10471** **NY Spills**
**0.477 mi.**
**2516 ft.** **Site 1 of 2 in cluster BG**

**Relative:**
**Higher**

**Actual:**
**157 ft.**

LTANKS:

| | |
|---|---|
| Name: | MOUNT SAINT VINCENT |
| Address: | 6301 RIVERDALE AVENUE |
| City,State,Zip: | NEW YORK, NY 10471-1093 |
| Spill Number/Closed Date: | 0303272 / 2004-07-27 |
| Facility ID: | 0303272 |
| Site ID: | 138624 |
| Spill Date: | 2003-06-27 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | B3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 0301 |
| Investigator: | TJDEMEO |
| Referred To: | Not reported |
| Reported to Dept: | 2003-06-27 |
| CID: | 398 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2003-06-27 |
| Spill Record Last Update: | 2008-05-23 |
| Spiller Name: | KWAME WATKINS |
| Spiller Company: | MOUNT SAINT VINCENT |
| Spiller Address: | 6301 RIVERDALE AV |
| Spiller County: | 001 |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| Spiller Contact: | KWAME WATKINS |
| Spiller Phone: | (718) 405-3210 |
| Spiller Extention: | Not reported |
| DEC Region: | 2 |
| DER Facility ID: | 12536 |
| Latitude: | 40.9125952 |
| Longitude: | -73.9026314 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was DEMEO Sangesland DDO Tank Test Failure letter sent to: Kwame Watkins College of Mount St. Vincent 6301 Riverdale Ave. Bronx, NY 7/27/04 TJD Spill closed and consolidated under existing open spill number 0301515. |
| Remarks: | NO CALL BACK NEEDED. UNCOVER, AND FIX AND RETEST. |

All TTF:

| | |
|---|---|
| Facility ID: | 0303272 |
| Spill Number: | 0303272 |
| Spill Tank Test: | 1528482 |
| Site ID: | 138624 |
| Tank Number: | 4 |
| Tank Size: | 10000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 138624 |
| Operable Unit ID: | 871308 |
| Operable Unit: | 01 |
| Material ID: | 504141 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | COLLEGE OF MT ST VINCENT |
| Address: | 6301 RIVERDALE AVENUE |
| City,State,Zip: | NEW YORK, NY 10471-1093 |
| Spill Number/Closed Date: | 0301515 / 2005-03-28 |
| Facility ID: | 0301515 |
| Site ID: | 232413 |
| Spill Date: | 2003-05-12 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| Spill Class: | B3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 0301 |
| Investigator: | RWAUSTIN |
| Referred To: | Not reported |
| Reported to Dept: | 2003-05-12 |
| CID: | 205 |
| Water Affected: | Not reported |
| Spill Notifier: | Responsible Party |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2003-05-12 |
| Spill Record Last Update: | 2008-05-23 |
| Spiller Name: | KWANE WATKINS |
| Spiller Company: | COLLEGE OF MT ST VINCENT |
| Spiller Address: | 6801 RIVERDALE AVE |
| Spiller County: | 001 |
| Spiller Contact: | CALLER |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 2 |
| DER Facility ID: | 12536 |
| Latitude: | 40.9125952 |
| Longitude: | -73.9026314 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was DEMEO 5/12/03 - Zhao/DO: TTF leter sent as well as expired PBS registration warning. 6/20/03 Veronica (Omega Environmental - 201 489 8700) Additional investigation is underway. Awaiting permit from buildings department. Second tightness test to be performed within 2 weeks. 7/7/03 TJD Omega Environmental sent letter documentinging all product has been removed from tanks. Contractor still awaiting permit from Buildings Department to open sidewalk. Subsurface investigation is required at site. 3/28/05 - Austin - Spill closed, and consoidated with #0485243, under Sharif Rahman from Tim DeMeo - end 8/29/03 TJD Omega sent tank testing results indicating tank 006 hass passes retest and no leak has been found associated with tank. Tank 006 still requires investigation and will be closed. Closure report to be submitted. 4/30/2004 SS sent new ttf ltr 5/18/2004 Sangesland received a letter from Omega Environmental stating that the tank still remains out of service. It was cleaned out and a temp tank was set up for fuel use. Plan is to removed and replace the tank within the next few months. A series of exploratory borings will be taken in the near future in order to determine the outer extent of potential contamination. The plan is to remove all contamination during the tank pull and to take end point samples at that time. 7/27/04 TJD Consolidation of open spills on property. Another Tank Test Failure reported (0303272). TTF on Tank #4 (10K). Spill will be closed and cross-referenced to be handled under existing open spill number. 11/23/04 - Austin - Closed and consolidated spill# 9312744 with this spill (0301515) - end |
| Remarks: | Not reported |

All TTF:

| | |
|---|---|
| Facility ID: | 0301515 |
| Spill Number: | 0301515 |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| Spill Tank Test: | 1528366 |
| Site ID: | 232413 |
| Tank Number: | 3 |
| Tank Size: | 7500 |
| Material: | Not reported |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

| | |
|---|---|
| Facility ID: | 0301515 |
| Spill Number: | 0301515 |
| Spill Tank Test: | 1528367 |
| Site ID: | 232413 |
| Tank Number: | 6 |
| Tank Size: | 2000 |
| Material: | Not reported |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 232413 |
| Operable Unit ID: | 869532 |
| Operable Unit: | 01 |
| Material ID: | 506007 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | COLLEGE OF MT. SAINT VINCENT - MISC |
| Address: | 6301 RIVERDALE AVENUE |
| City,State,Zip: | NEW YORK, NY 10471-1093 |
| Spill Number/Closed Date: | 0485243 / 2007-11-13 |
| Facility ID: | 0485243 |
| Site ID: | 334385 |
| Spill Date: | 2004-11-29 |
| Spill Cause: | Tank Test Failure |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | C3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 0301 |
| Investigator: | axdorono |
| Referred To: | Not reported |
| Reported to Dept: | 2004-11-30 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Responsible Party |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2004-11-30 |
| Spill Record Last Update: | 2008-05-23 |
| Spiller Name: | Not reported |
| Spiller Company: | COLLEGE OF MT. ST VINCENT |
| Spiller Address: | 6301 RIVERDALE |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | (718) 405-3211 |
| Spiller Extention: | Not reported |
| DEC Region: | 2 |
| DER Facility ID: | 12536 |
| Latitude: | 40.9124250 |
| Longitude: | -73.9026770 |
| DEC Memo: | Site visit scheduled for 12/1/04 3/3/2005 Project transferred from DeMeo to Shariff Rahman. Fenley & Nichol called to say the tank was removed, area excavated, clean endpoints and a new tank installed. They will send a report to Shariff Rahman. 11.04.05 Sharif- Rec'd and reviewed the closure report prepared by Fenley and Nicol.More remedial effort should have been done to consider the closure request, specifically ground water delineation is required. Letter requiring additional remedial works was sent to RP couple of months ago which is on file, but no reply, as of now, received. 12/20/05 Case was transferred to Koon Tang for reassignment. 1/13/2006 - Feng - File reviewed by Feng: 1) 3 #2 fuel oil USTs were removed on 11/30/2004 (10,000-gallon), 12/2/2004 (1,200-gallon), and 12/6/2004 (7,500-gallon). All tanks appeared to be in poor to very poor condition. 2) When removing the tank #1, it was found that perched water tih a significant amount of product within the tank excavation, and was removed during the preparation for the tank installation. And when removing tank #2 and #3, product was also found in the excavation, the contaminated water was removed from the excavation. 3) 11 soil samples were taken, but only 10 sample analyticals were provided in the report. There 10 soil samples were collected from side walls of the excavation. And it shows that up to 500 ppb Benzene and some SVOCs exceedance, such as 17,130 ppb Naphthalene, 2,423 ppb Benzo(a)Anthracene, 1,038 ppb Benzo(b)Fluoranthene, 4,706 ppb Chrysene, and 2,175 ppb Benzo(a)Pyrene. 4) Request spill closure, but denied by DED Rahman (previous PM) and sent letter on 3/28/2005 requested the following: a) scaled site plan, b) samples results from north end of excavation at level of the perched water table, c) remediation for the remaining contaminated soil in south wall zone of tank #1, d) bottom sample result, e)samples from below the concrete |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

slabs in each excavation, f) tank disposal receipt, non-hazardous waste manifest for both soil and tank contents. No response to this letter. Called Robert Furguson (Fenley and Nicol Environmental) and left a message to call back. 1/18/2006 - Feng - Spoke to Cheryl and Mark (F&N). F&N will take groundwater samples on 1/24,25/2006. And will fax the response to DEC Rahman's letter on 3/28/2005. (RJF) 02/09/06: This spill transferred from R.Feng to S.Kraszewski. 02/16/06: I spoke with Robert from F & N (631-586-4900) ext. 190 for an update. GW delineation is complete and the lab results will be in soon. The report should reach my desk by next week. - SK 03/02/06: No GW delineation report yet. SK spoke with Asima Jansveld (212-312-3781) from EDC. She was wondering about the status of this site and how close, if at all it was to an NFA. I told her that based on the information I have this site is nowhere close to an NFA. I'm still waiting to receive a report for review and I cannot give any reasonable estimate as to the degree or to a time-line for this site. When she receives the next report she will call me. - SK 03/06/06: Reviewed Soil Delineation Report submitted by Fenley & Nicol Environmental dated February 28, 2006. Six soil borings were taken just East of the tanks along Spellman Hall following North along the road for roughly 100 yards. This subsurface investigation was performed subsequent to the discovery of contaminated soils and GW during excavation of a 10K UST in December 2004. Only one soil boring, SB-6, the northern-most boring exhibited SVOC exceedances: Benzo(a)pyrene - 321 ppb, Benzo(a)anthracene - 310 ppb, Benzo(b)floranthene - 439 ppb. No VOCs were detected above TAGM RSCOs in any of the six boring samples. Only three of the boring results are given in the data tables, SB-3, SB-4 and SB-5. However, the lab data sheets indicate that SB-3, SB-4 and SB-5 were analyzed. Despite the discovery of GW contamination from Dec. 2004, no GW sampling was performed during this investigation. It appears that perched clay lens runs above bedrock begins from SB-4 and runs to SB-6, following possibly several clay layers ranging from 1 to 6 fbg that are confining the GW. However, no borings taken from East to West. The college is planning to construct a dorm in this area, which means that excavation of the area would take place. SK spoke with Marc Atamian from Fenley and Nicol, they feel that the contamination is isolated. I asked him to fax additional figures and lab data since the site plan showed additional borings not accounted for by the report. He will fax them to me this afternoon. Received boring locations and lab data for borings B-9 and B-12 from September 2005. Unsure who performed this work, it appears that the borings were done in accordance with a GeoTechincal survey. Spoke with Robert Furguson. The Site Delineation investigation was to basically establish the unknown boundary further from the tank area. The three samples thought to be clean (SB-3, SB-4, SB-5) were analyzed to check for additional contamination. Boring SB-1, and SB-2 were not analyzed because contamination is assumed to be there. No consistent perched GW encountered from borings. The excavation will mostly remediate the site but if it doesn't additional remedial work will be required, must also deal with any GW encountered. Robert will let me know where the proposed structure is to be placed, i.e. were they plan to excavate. - SK 03/07/06: SK spoke with Asima Jansveld from NYCEDC, she requests a copy of the approval letter when it is sent out (electronic and hardcopy). AJansveld@nycedc.com NYCEDC 110 William Street New York, NY 10038 - SK 03/09/06: Received Site Layout Plan from Fenley & Nicol for renovation activities to be conducted

**MOUNT SAINT VINCENT (Continued)** **U001835537**

on-site. Approval letter is prepared and will be sent out tomorrow, March 10, 2006. The letter approves F & N's recommendations for source removal. Report must include recommendations for remedial action/investigation for any remaining contamination. - SK 04/06/06: Called Rob Furguson, left a message to call back. - SK 09/29/06: Received email from Anthony Sigona at Fenley and Nicol Environmental. He attached the proposed work schedule for removal of any source of contamination from the site followed by necessary remedial intervention to address any remaining contamination. Work is stated to begin in the Summer of 2007. Sent email reminding him to submit a work plan for review before starting any work. - SK 02/15/2007: This spill case was transferred to Ainura Doronova. - AD. 02/27/2007: Reviewed site file. Spoke to Frank Gehrling (senior geologist)of Fenley&Nicol Environmental (FNE)regarding work plan for remedial soil excavation at the site. He said, that he will submit WP after its approval by college authority. AD 04/16/2007: Received a call from Frank Gehrling of FNE regarding start date of excavation and work plan. He will submit WP due May 2007. Excavation work will start June 4, 2007. AD 05/15/2007: Called and left a message to F. Gehrling regarding submittal of work plan. After about an hour received email from Austin Randall who copied to me a work plan for this site, which he received from Anthony Sigona (department manager)of FNE. In his email Mr. Sigona is asking, who is managing spill case for this site. It appears that F. Gehrling did not inform A. Sigona about my calls and my status. Reviewed and uploaded work plan to e-docs. F&NE propose to excavate remaining contamination and collect confirmatory endpoint soil samples from sidewalls of the excavation. Summary report will be submitted after work completion and obtaining analytical results. If removal of all contamination is not feasible, a recommendation will be made for additional remedial actions. AD 05/16/2007: Sent an email to Anthony Sigona asking for a diagram of the area of proposed excavation with indication of its approximate size. AD 05/17/2007: Received an email from Mr. Sigona. He will send the diagram in the beginning of the next week. AD 05/21/2007: Received via email a letter and a requested map of excavation area from Frank Gehrling of F&NE. The excavation will proceed along the road length. Approximately 1,000 ton of contaminated soil will be excavated. Issued and sent to Glen Barnstable of the College of Mount St. Vincent an approval letter for Remedial Work Plan with modification to collect also endpoint soil samples from the bottom of the excavation. If bottom of the excavation is below groundwater table, then groundwater grab samples should be taken. Planning to visit the site on June 5, 2007 with Jon Kolleeny. AD 06/05/2007: J. Kolleeny and I visited the site to observe soil excavation. The contractor (Fenley & Nicol)was only excavating to a depth of 2 feet, which did not address deeper soil contamination detected during earlier sampling in the area. Mr. Frank Gehrling said that soil under asphalt was saturated with product to the depth of two feet and they were removing this layer along the length of the road. He was taking soil samples to analyze with PID. Saturated soil showed 13ppm (v). We requested that a test pit be excavated deeper down-gradient of the former USTs to verify the presence of impacts at greater depth, and asked that soil borings also be advanced at several locations between former UST and the road to confirm deeper soil impacts and collect groundwater grab samples to evaluate impact to groundwater. AD 06/06/2007: Received call from F. Gehrling of FNE. They excavated the test pit till 6,5 feet and no contamination was detected. On 6.5 feet

**MOUNT SAINT VINCENT (Continued)** **U001835537**

depth groundwater was encountered and excavation was stopped. F. Gehrling did not collected groundwater grab sample as we requested saying that he prefer to collect it from borings they plan to advance according to our request. J. Kolleeny told him to submit brief work plan for soil borings locations in few weeks. AD 06/07/2007: Received a call from FNE. They said that excavation on one side of the road is completed and asked for permission to back fill the excavated area. PID readings did not detected presence of petroleum contamination in the unexcavated soil and endpoint soil samples were collected. They also told me that there was a mistake in the Soil Delineation Report submitted by FNE previously: the contamination was found in the depth 1,5 feet not 15 feet as was stated in said report. Based on this information, permission to backfill was given. AD 06/12/2007: Received a call from Frank Gehrling of FNE. He said that they have completed removal of contaminated soil and asked for further actions. Told him to advance three soil borings: first - near south wall of former 10,000 gallons UST; second - in the vicinity of test pit; third - in the area of electric cable, where some product was found. F. Gerling agreed to do it and will send us paper work. AD 07/30/2007: Spoke with Mr. A. Sigona of FNE. Frank Gehrling is no longer working for them. New project manager for this site is Mr. Brian McCabe (phone: (631)586-4900 ext. 191). Mr. Sigona told me that requested soil borings were done and they took groundwater samples. Report for additional investigation will be submitted shortly. AD 09/24/2007: After few phone conversations and requests to submit summary report, received Letter Report of Findings from FNE. Will review. AD 09/27/2007: FNE performed close-out subsurface investigation, which included the installation of three soil borings and three temporary groundwater points in the vicinity of former UST and along the roadway, where additional hot spot areas were identified. A total of three soil samples and three groundwater samples were obtained and analysed for VOCs and SVOCs. A review of labresults for soil, shows that samples from all three soil borings do not indicate any elevated concentrations of VOCs or SVOCs. Labdata for groundwater samples indicate in monitoring point GW-0703-1 elevated concentrations of total VOCs as 220 ppb, and total SVOCs - 1760 ppb. This point was installed in the vicinity of the former UST, downgradient of the tank. Monitoring points GW-0703-2 and GW-0703-3 do not indicate any elevated concentrations of VOCs and SVOCs. These poins were installed along the road down-gradient off the monitoring point GW-0703-1. Soil boring logs are abcent. Based on the analyzed data FNE states that concentrations of contamination on the investigated area have exeedances, however, nominal enough not to pose a treat to human health or the environment. FNE requests to close this spill case and to issue NFA letter. AD 09/28/2007: Called and left a message to Mr. McCabe and asked to submit soil boring logs. AD 10/02/2007: Spoke with Brian McCabe regarding boring logs. He promised to submit them in a few days. AD 10/16/2007: Received electronic version of Letter Report of Fidings together with the requested boring logs. Have to prepare a letter. AD 11/05/2007: Discussed the site situation with Jon Kolleeny and Vadim Brevdo. At this discussion it was agreed that elevated concentrations of SVOCs exist in a very limited area of the former UST field; migration of this remaining contamination was not detected in the downgradient monitoring points and that these levels of SVOCs concentrations do not present threat to public health or to the environment. AD 11/13/2007: Issued NFA letter addressed to Tim Drury (Facilities

**MOUNT SAINT VINCENT (Continued)** **U001835537**

Engineering Manager of College of Mount St. Vincent) with copies to J. Kolleeny - DEC and B. McCabe - FNE. Downloaded a copy to E-docs. AD
Not reported
Remarks: On site removing/replacing tank #4 at Spellman Bldg. and discovered soil contamination and sheen in excavation

All TTF:
Facility ID: 0485243
Spill Number: 0485243
Spill Tank Test: 1548346
Site ID: 334385
Tank Number: 4
Tank Size: 10000
Material: 0001
EPA UST: Not reported
UST: Not reported
Cause: Not reported
Source: Not reported
Test Method: 03
Test Method 2: Horner EZ Check I or II
Leak Rate: Not reported
Gross Fail: Not reported
Modified By: TJDEMEO
Last Modified Date: Not reported

All Materials:
Site ID: 334385
Operable Unit ID: 1096519
Operable Unit: 01
Material ID: 576355
Material Code: 0001A
Material Name: #2 fuel oil
Case No.: Not reported
Material FA: Petroleum
Quantity: Not reported
Units: G
Recovered: Not reported
Oxygenate: False

AST:
Name: COLLEGE OF MOUNT SAINT VINCENT
Address: 6301 RIVERDALE AVENUE
City,State,Zip: BRONX, NY 10471
Region: STATE
DEC Region: 2
Site Status: Active
Facility Id: 2-283886
Program Type: PBS
UTM X: 592397.08535
UTM Y: 4529639.45233
Expiration Date: 07/14/2027
Site Type: School

Affiliation Records:
Site Id: 12553
Affiliation Type: Mail Contact

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| Company Name: | COLLEGE OF MOUNT SAINT VINCENT |
| Contact Type: | Not reported |
| Contact Name: | RYAN ANDERSON |
| Address1: | 6301 RIVERDALE AVENUE |
| Address2: | Not reported |
| City: | BRONX |
| State: | NY |
| Zip Code: | 10471-1093 |
| Country Code: | 001 |
| Phone: | (718) 405-3403 |
| EMail: | RYAN.ANDERSON@MOUNTSAINTVINCENT.EDU |
| Fax Number: | Not reported |
| Modified By: | MFLEONAR |
| Date Last Modified: | 2017-07-20 |

| | |
|---|---|
| Site Id: | 12553 |
| Affiliation Type: | Facility Operator |
| Company Name: | COLLEGE OF MOUNT SAINT VINCENT |
| Contact Type: | Not reported |
| Contact Name: | COLLEGE OF MOUNT SAINT VINCENT |
| Address1: | Not reported |
| Address2: | Not reported |
| City: | Not reported |
| State: | NN |
| Zip Code: | Not reported |
| Country Code: | 001 |
| Phone: | (718) 405-3401 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | MFLEONAR |
| Date Last Modified: | 2017-07-20 |

| | |
|---|---|
| Site Id: | 12553 |
| Affiliation Type: | Emergency Contact |
| Company Name: | COLLEGE OF MOUNT SAINT VINCENT |
| Contact Type: | Not reported |
| Contact Name: | RYAN ANDERSON |
| Address1: | Not reported |
| Address2: | Not reported |
| City: | Not reported |
| State: | NN |
| Zip Code: | Not reported |
| Country Code: | 999 |
| Phone: | (718) 405-3403 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | MFLEONAR |
| Date Last Modified: | 2017-07-20 |

| | |
|---|---|
| Site Id: | 12553 |
| Affiliation Type: | Facility Owner |
| Company Name: | COLLEGE OF MOUNT SAINT VINCENT |
| Contact Type: | VICE PRESIDENT FOR OPERATIONS |
| Contact Name: | KEVIN DEGROAT |
| Address1: | 6301 RIVERDALE AVE |
| Address2: | Not reported |
| City: | BRONX |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| State: | NY |
| Zip Code: | 10471-1093 |
| Country Code: | 001 |
| Phone: | (718) 405-3401 |
| EMail: | Not reported |
| Fax Number: | Not reported |
| Modified By: | MFLEONAR |
| Date Last Modified: | 2017-07-20 |

Tank Info:

| | |
|---|---|
| Tank Number: | 001 |
| Tank Id: | 14937 |
| Material Code: | 0001 |
| Common Name of Substance: | #2 Fuel Oil (On-Site Consumption) |

Equipment Records:

B00 - Tank External Protection - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G02 - Tank Secondary Containment - Vault (w/access)
J02 - Dispenser - Suction Dispenser
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
H00 - Tank Leak Detection - None
I00 - Overfill - None
L09 - Piping Leak Detection - Exempt Suction Piping

| | |
|---|---|
| Tank Location: | Aboveground - contact with soil.... Tank bottom rests on soil, allowing no visual inspection. |
| Tank Type: | Steel/Carbon Steel/Iron |
| Tank Status: | In Service |
| Pipe Model: | Not reported |
| Install Date: | 05/01/1998 |
| Capacity Gallons: | 10000 |
| Tightness Test Method: | - |
| Date Test: | Not reported |
| Next Test Date: | Not reported |
| Date Tank Closed: | Not reported |
| Register: | True |
| Modified By: | MJGRIFFI |
| Last Modified: | 05/09/2022 |
| Material Name: | #2 fuel oil (on-site consumption) |

| | |
|---|---|
| Tank Number: | 008 |
| Tank Id: | 14944 |
| Material Code: | 0001 |
| Common Name of Substance: | #2 Fuel Oil (On-Site Consumption) |

Equipment Records:

B00 - Tank External Protection - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
A00 - Tank Internal Protection - None

**MOUNT SAINT VINCENT (Continued)** **U001835537**

D01 - Pipe Type - Steel/Carbon Steel/Iron
H00 - Tank Leak Detection - None
I00 - Overfill - None
L09 - Piping Leak Detection - Exempt Suction Piping

| | |
|---|---|
| Tank Location: | Aboveground - contact with soil.... Tank bottom rests on soil, allowing no visual inspection. |
| Tank Type: | Steel/Carbon Steel/Iron |
| Tank Status: | In Service |
| Pipe Model: | Not reported |
| Install Date: | 05/01/1998 |
| Capacity Gallons: | 2000 |
| Tightness Test Method: | 03 |
| Date Test: | 05/01/1998 |
| Next Test Date: | Not reported |
| Date Tank Closed: | Not reported |
| Register: | True |
| Modified By: | MJGRIFFI |
| Last Modified: | 05/09/2022 |
| Material Name: | #2 fuel oil (on-site consumption) |

| | |
|---|---|
| Tank Number: | 010 |
| Tank Id: | 14946 |
| Material Code: | 0001 |
| Common Name of Substance: | #2 Fuel Oil (On-Site Consumption) |

Equipment Records:

B00 - Tank External Protection - None
C00 - Pipe Location - No Piping
F00 - Pipe External Protection - None
G00 - Tank Secondary Containment - None
J02 - Dispenser - Suction Dispenser
A00 - Tank Internal Protection - None
D01 - Pipe Type - Steel/Carbon Steel/Iron
H00 - Tank Leak Detection - None
I00 - Overfill - None
L09 - Piping Leak Detection - Exempt Suction Piping

| | |
|---|---|
| Tank Location: | Aboveground in subterranean vault with access for inspections..... Tank in subterranean vault but accessible for inspection. |
| Tank Type: | Steel/Carbon Steel/Iron |
| Tank Status: | In Service |
| Pipe Model: | Not reported |
| Install Date: | 05/01/1998 |
| Capacity Gallons: | 5000 |
| Tightness Test Method: | - |
| Date Test: | Not reported |
| Next Test Date: | Not reported |
| Date Tank Closed: | Not reported |
| Register: | True |
| Modified By: | MJGRIFFI |
| Last Modified: | 05/09/2022 |
| Material Name: | #2 fuel oil (on-site consumption) |

SPILLS:

| | |
|---|---|
| Name: | 6301 RIVERDALE AVENUE |
| Address: | 6301 RIVERDALE AVENUE |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| City,State,Zip: | NEW YORK, NY 10471-1093 |
| Spill Number/Closed Date: | 9312774 / 2004-11-23 |
| Facility ID: | 9312774 |
| Facility Type: | ER |
| DER Facility ID: | 12536 |
| Site ID: | 146692 |
| DEC Region: | 2 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C3 |
| SWIS: | 0301 |
| Spill Date: | 1994-01-29 |
| Investigator: | RWAUSTIN |
| Referred To: | Not reported |
| Reported to Dept: | 1994-01-29 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1994-03-10 |
| Spill Record Last Update: | 2008-05-23 |
| Spiller Name: | Not reported |
| Spiller Company: | COLLEGE OF ST VINCENT |
| Spiller Address: | 6301 RIVERDALE AVE |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | 40.9125952 |
| Longitude: | -73.9026314 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was AUSTIN Closed 10/27/03 by A. Zhitomirsky Reopened this spill again on 04/29/04 by Ahmed.It is reopened because Mr. Dave,a operator of A-1 Crown leak Inc., reported tank test failure on 05/12/03. Tank number is #003, total tank volume is 7500 and product volume is 6128 and product type is # Fuel Oil. Operator's contact telephone number is 516-939-2959 and address is 366 North Broadway suite 410, Jerico, NY 11753. 04/29/04: Reassigned from Zhitomirsky to Austin. Updated by Rashid Ahmed. 11/23/04 - Austin - this spill report has been closed and consolidated with spill # 0301515 - end |
| Remarks: | LEAKING RETURN LINE, CLEAN UP CREW IS ON THE WAY - NO OTHER AGENCIES NOTIFIED. |

All Materials:

| | |
|---|---|
| Site ID: | 146692 |
| Operable Unit ID: | 994725 |
| Operable Unit: | 01 |
| Material ID: | 388191 |
| Material Code: | 0003A |
| Material Name: | #6 fuel oil |
| Case No.: | Not reported |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| Material FA: | Petroleum |
| Quantity: | 100.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | COLLEGE OF MOUINT ST VINC |
| Address: | 6301 RIVERDALE AVENUE |
| City,State,Zip: | NEW YORK, NY 10471-1093 |
| Spill Number/Closed Date: | 0500241 / 2005-10-20 |
| Facility ID: | 0500241 |
| Facility Type: | ER |
| DER Facility ID: | 12536 |
| Site ID: | 343149 |
| DEC Region: | 2 |
| Spill Cause: | Other |
| Spill Class: | D4 |
| SWIS: | 0301 |
| Spill Date: | 2005-04-06 |
| Investigator: | SFRAHMAN |
| Referred To: | Not reported |
| Reported to Dept: | 2005-04-06 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-04-06 |
| Spill Record Last Update: | 2008-05-23 |
| Spiller Name: | BERNIE LUDWIG |
| Spiller Company: | COLLEGE OF MOUINT ST VINC |
| Spiller Address: | 6301 RIVERDALE AVE |
| Spiller Company: | 001 |
| Contact Name: | BERNIE LUDWIG |
| Latitude: | 40.9124250 |
| Longitude: | -73.9026770 |
| DEC Memo: | 04/14/05-SR// Mr Burnie will send a report about the source and clean up of contaminants. 10.20.05<br>Sharif- This spill is closed 'cause spill# 0485243 is open at the same location and source is same also. |
| Remarks: | WATER COMING INTO CULVERT, WHILE CLEANING VAULT HAVE FOUND RESIDUE : |

All Materials:

| | |
|---|---|
| Site ID: | 343149 |
| Operable Unit ID: | 1101829 |
| Operable Unit: | 01 |
| Material ID: | 582065 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | COLLEGE OF MT.ST VINCENT |
| Address: | 6301 RIVERDALE AVENUE |
| City,State,Zip: | NEW YORK, NY 10471-1093 |
| Spill Number/Closed Date: | 0312487 / 2004-05-28 |
| Facility ID: | 0312487 |
| Facility Type: | ER |
| DER Facility ID: | 12536 |
| Site ID: | 232415 |
| DEC Region: | 2 |
| Spill Cause: | Unknown |
| Spill Class: | C4 |
| SWIS: | 0301 |
| Spill Date: | 2004-02-10 |
| Investigator: | TJDEMEO |
| Referred To: | Not reported |
| Reported to Dept: | 2004-02-10 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2004-02-10 |
| Spill Record Last Update: | 2008-05-23 |
| Spiller Name: | MARK HESS |
| Spiller Company: | COLLEGE OF MT.ST VINCENT |
| Spiller Address: | 6301 RIVERDALE AVE |
| Spiller Company: | 001 |
| Contact Name: | MARK HESS |
| Latitude: | 40.9125952 |
| Longitude: | -73.9026314 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was DEMEO DeMeo responded to the site 2/12/04 TJD Site inspection 2/10/04. Spill of approximately 200 gallons #4 oil into tank room and boiler room. Deteriorated fill pipe is suspected cause. PTC retained for cleanup. Liquids removed with vacuum truck. Inside boiler room is a metal lined sump, which is rusted and open to sub-surface soils. Investigation of soils surrounding sump pit is required. Tank #10 is a 5,000 gallon AST which is rusted and flaking. Facility representatives were directed to either test tank or remove it from service. A plan to replace this tank has been accelerated. Facility representatives have agreed tank will not pass test and should be replaced. On or before Friday |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

2/13/04 tank must be emptied of all product and must remain Out Of Service until either it is
replaced or it passes a system test. Soil contamination letter sent to facility. 3/4/04 tjd DAVID
EXTRAND (OMEGA) contacted Demeo to inform DEC tank has been removed. According to David the tank
room floor is in good shape to cracks, holes or drains and will be sealing with 2-part Epoxy
coating. David wanted further information regarding sampling requirements for area of sump pit. A
minimum of (3) samples are required (1) below sump bottom and (2) along exposed sides (pit is in a
corner of boiler room. PTC was contacted for pump-out volumes, a total of 600 gallons of oil/water
mixture was removed on 2/10 by PTC. 5/28/04 TJD Closure report submitted by Omega Environmental
Sevices. Minor SVOC contamination identified which exceeds TAGM allowable soil concentrations.
Property owner/management will seal sump pit with 2-part epoxy coating to prevent further migration
of contaminants. Site does not meet standards. No further action required. Spill closed.

Remarks: tank let go, truck on site cleaning up:

All Materials:

| | |
|---|---|
| Site ID: | 232415 |
| Operable Unit ID: | 877724 |
| Operable Unit: | 01 |
| Material ID: | 497690 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 50.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | COLLEGE OF MT ST VINCENT |
| Address: | 6301 RIVERDALE AVENUE |
| City,State,Zip: | NEW YORK, NY 10471-1093 |
| Spill Number/Closed Date: | 9611908 / 1997-01-10 |
| Facility ID: | 9611908 |
| Facility Type: | ER |
| DER Facility ID: | 12536 |
| Site ID: | 232416 |
| DEC Region: | 2 |
| Spill Cause: | Unknown |
| Spill Class: | C4 |
| SWIS: | 0301 |
| Spill Date: | 1997-01-02 |
| Investigator: | KATZ |
| Referred To: | Not reported |
| Reported to Dept: | 1997-01-02 |
| CID: | 233 |
| Water Affected: | Not reported |
| Spill Source: | Tank Truck |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1997-01-02 |
| Spill Record Last Update: | 2008-05-23 |
| Spiller Name: | SANDY GARCIA |
| Spiller Company: | MYSTIC TRANSPORT |
| Spiller Address: | 1901 STEINWAY ST |
| Spiller Company: | 001 |
| Contact Name: | Not reported |
| Latitude: | 40.9125952 |
| Longitude: | -73.9026314 |
| DEC Memo: | Not reported |
| Remarks: | OVERFLL TO SOIL AND PAVEMENT CLEAN UP COMPLETE |

All Materials:

| | |
|---|---|
| Site ID: | 232416 |
| Operable Unit ID: | 1043258 |
| Operable Unit: | 01 |
| Material ID: | 340556 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 20.00 |
| Units: | G |
| Recovered: | 20.00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | POLE 7093 |
| Address: | 6301 RIVERDALE AVENUE |
| City,State,Zip: | NEW YORK, NY 10471-1093 |
| Spill Number/Closed Date: | 0311486 / 2004-03-10 |
| Facility ID: | 0311486 |
| Facility Type: | ER |
| DER Facility ID: | 12536 |
| Site ID: | 232414 |
| DEC Region: | 2 |
| Spill Cause: | Traffic Accident |
| Spill Class: | C3 |
| SWIS: | 0301 |
| Spill Date: | 2004-01-12 |
| Investigator: | JHOCONNE |
| Referred To: | Not reported |
| Reported to Dept: | 2004-01-12 |
| CID: | 73 |
| Water Affected: | Not reported |
| Spill Source: | Commercial/Industrial |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2004-01-12 |
| Spill Record Last Update: | 2008-05-23 |
| Spiller Name: | ERT |
| Spiller Company: | CON EDISON |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | ERT |
| Latitude: | 40.9125952 |
| Longitude: | -73.9026314 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'CONNELL e2mis no. 151692: 12-Jan-200 05:26 Troubleshooter H/V E.Carbonaro 42479 reports while on location for a hit pole and customer interuption discovered a New York City Fire truck had skidded on ice and snow and hit Pole 7093 causing the pole to split and the transformer to fall on the truck. The transformer fell on the truck and is leaking approximately 10 gallons of oil on the truck, asphalt, and soil. Two FDNY personnel werereported with minor injuries and the Police Dept was on location. DEP also on location. Clean Harbors was notified and ETA is 06:00, crane on location (05:30) to remove transformer off of truck. The oil is contained on asphalt, soil and snow. 12-Jan-2004 07:30 hrs Lab Sequence Number: 04-00213-001 Aroclor 1260 < 1.0 ppm 11:00 hrs. EH&S rep Ken Traeger reports NYC Fire-Engine #81 has been decontaminated. Vehicle is being taken from site. 14:00hrs. EH&S rep Ken Trager reports that Clean Harbor Environmental double washed 30' x 60' area of asphalt. The crews generated 10 55-gallon drums of nonhazardous solid waste. 100 gallons of waste water was also generated and put into the contractor's tanker truck. Overhead crews on location have removed the defective transformer. The overhead pole is being replaced. A new transformer is being installed. Clean up is complete. |
| Remarks: | VEHICLE ACCIDENT STRUCK UTILITY POLE CAUSING TRANSFORMER TO FALL TO GROUND RESULTING IN RELEASE OF TRANSFORMER OIL ON VEHICLE AND ASPHALT. CLEAN-UP PENDING. |

All Materials:

| | |
|---|---|
| Site ID: | 232414 |
| Operable Unit ID: | 879093 |
| Operable Unit: | 01 |
| Material ID: | 500289 |
| Material Code: | 0020A |
| Material Name: | transformer oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 10.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| Name: | COLLEGE OF MOUINT ST HELE |
| Address: | 6301 RIVERDALE AVENUE |
| City,State,Zip: | NEW YORK, NY 10471-1093 |
| Spill Number/Closed Date: | 0409711 / 2004-12-01 |
| Facility ID: | 0409711 |
| Facility Type: | ER |
| DER Facility ID: | 12536 |
| Site ID: | 334510 |
| DEC Region: | 2 |
| Spill Cause: | Abandoned Drums |
| Spill Class: | C4 |
| SWIS: | 0301 |
| Spill Date: | 2004-11-30 |
| Investigator: | TJDEMEO |
| Referred To: | Not reported |
| Reported to Dept: | 2004-11-30 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2004-12-01 |
| Spill Record Last Update: | 2008-05-23 |
| Spiller Name: | DENTON STARGEL |
| Spiller Company: | COLLEGE OF MOUINT ST HELE |
| Spiller Address: | 163 RIVERDALE ROAD |
| Spiller Company: | 001 |
| Contact Name: | DENTON STARGEL |
| Latitude: | 40.9124250 |
| Longitude: | -73.9026770 |
| DEC Memo: | Duplicate - This spill number is closed Cross Ref to Spill # 0485243 |
| Remarks: | PBS No: 2-283886 |

All TTF:

| | |
|---|---|
| Facility ID: | 0409711 |
| Spill Number: | 0409711 |
| Spill Tank Test: | 1548358 |
| Site ID: | 334510 |
| Tank Number: | 4 |
| Tank Size: | 10000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Watchdog |
| Last Modified Date: | Not reported |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

All Materials:

| | |
|---|---|
| Site ID: | 334510 |
| Operable Unit ID: | 1096644 |
| Operable Unit: | 01 |
| Material ID: | 576560 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | COLLEGE OF MOUNT ST. VINC |
| Address: | 6301 RIVERDALE AVENUE |
| City,State,Zip: | NEW YORK, NY 10471-1093 |
| Spill Number/Closed Date: | 0508760 / 2007-04-16 |
| Facility ID: | 0508760 |
| Facility Type: | ER |
| DER Facility ID: | 12536 |
| Site ID: | 354423 |
| DEC Region: | 2 |
| Spill Cause: | Unknown |
| Spill Class: | C4 |
| SWIS: | 0301 |
| Spill Date: | 2005-10-21 |
| Investigator: | rvketani |
| Referred To: | Not reported |
| Reported to Dept: | 2005-10-21 |
| CID: | 408 |
| Water Affected: | Not reported |
| Spill Source: | Unknown |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2005-10-21 |
| Spill Record Last Update: | 2008-05-23 |
| Spiller Name: | GLENN BARNSTABLE |
| Spiller Company: | COLLEGE OF MOUNT ST. VINC |
| Spiller Address: | 6301 RIVERDALE AVE |
| Spiller Company: | 001 |
| Contact Name: | GLENN BARNSTABLE |
| Latitude: | 40.9124250 |
| Longitude: | -73.9026770 |
| DEC Memo: | Sangesland spoke to Sigona who was at the site. Building has 2 UST's registered (10,000 & 8,000) unknown which one has the problem. Basement area adjacent to one of the UST's has 100 gal of oil floating on 1000 gal of water in the vault area. Sump and basement floor are also impacted. This looks like a long term problem. Building Super is new on the job and |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

had not been in this area of
the basment before. Fenley & Nicol will mobilize a vac truck and steam
cleaner early next week.
Sigona would like Jeff Vought to come to the site to inspect it before
the clean up is done. After
the cleanup, DEC may require boring/well installation adjacent to the
UST just outside the basement
wall/vault. 10/21/05-Vought-Spoke to Sigona and tanks were tested.
Free product in sump. Vought
will perform site visit after site is cleaned.
11/28/05-Vought-Received call from Mark (Fenley &
Nicol 631-586-4900x190 cell 516-769-1810) that work will be occurring
tomorrow. Vought returned
call and left message to return call. 12/5/05-Vought-Received message
from Mark. Vought returned
call and left message to return call. ========== NOTES ABOVE
BELONG TO SPILL CASE
#0485243 as per a conversation between Raphael Ketani, case manager,
and Steve Sangesland, Spills
Unit, on 4/18/07 - this was originally 2 cases and was later split
into a case for the two tanks in
the vault above, and a case for the 20,000 gal. tank and its boiler
room below
========== 02/28/06-Hiralkumar Patel.
Vought received Spill Cleanup
Report on Feb. 22 2006. Abstracts of report: - fiberglass insulation
was removed from the steam
pipe running along the western wall of the boiler room to properly
clean the oily sludge in the
trench beneath the pipe. all oil-stained fiberglass sealed in 55 gal
drum - oily sludge was
shoveled out of the trench - power washer was utilized to remove oil
staining from the bottom of
the trench as well as two pipes. - all buckets and containers filled
with oil was cleaned -
oil/water mixture was identified in the sump in the northwestern
corner of boiler room - sump was
frequently recharging with groundwater within an hour of removing the
liquid. hot water power
washer was brought in to successfully remove the oil staining from the
walls of the sump. - ALL
STANDING LIQUID WAS REMOVED TO THE BOTTOM, WHICH WAS A SOIL BOTTOM
WITH GROUNDWATER ENTERING. -
within coal storage room, behind 275 gal AST, was a standing pool of
oil/water mixture approx. four
feet deep with miscellaneous debris within the liquid. - after
draining the room, the walls were
cleaned utilizing a hot-water power washer - approx. 2009 gal of
liquid was removed. - approx. 13
drums of hydrocarbon impacted soil were removed. - usage of two
unknown pipe at the bottom of
trench is presently unknown. - part of cleanup, a 20,000 gal UST was
investigated - oil stain
adjcent to vent pipe 03/07/06-Hiralkumar Patel. Spoke with Mr. Robert
Ferguson at Fenley & Nicol.
but as somebody else worked on this case, he told me that the
geologist who worked will call back

**MOUNT SAINT VINCENT (Continued)** **U001835537**

tomorrow. 03/08/06-Hiralkumar Patel. call Fenley and operator transferred me to David. left message for David. **ask about sump. - ALL STANDING LIQUID WAS REMOVED TO THE BOTTOM, WHICH WAS A SOIL BOTTOM WITH GROUNDWATER ENTERING.** 05/17/06-Vought-Spill transferred from DEC Vought to DEC Ketani as per DEC Austin. 6/22/06 - Raphael Ketani. PBS case #2-283886: all #2 fuel; tanks 1,2,5,6,8 to 12 in service; tanks 3,4,7 removed. The 275 gal. tank isn't registered. An 8000 gal. and a 10,000 gal. tank were installed as replacements on 12/1/04. I talked to Brian McCabe, the department head at Fenley & Nicol (631) 586-4900. He said the case manager for the site left the company. He said he wasn't completely familiar with the case. I told him that I had no documentation as to what happened, how things were cleaned up, how things were investigated and where things stand now. He said he will send me all of the documentation he currently has in the company files. 7/20/06 - Raphael Ketani. I spoke with Mr. McCabe and Anthony Sigona regarding the spill. Mr. McCabe referred me to Mr. Sigona as he was the one who was familiar with the spill. He explained that they did the cleanup by collecting the oil and water and cleaning everything. However, he said that there appeared to be a source present for the seeping oil. He said that his crew hadn't been back there, but he suspected the UST that was present. Mr. Sigona mentioned a report that was written regarding the spill and the cleanup. I told him I didn't have it. He said he will send it to me, along with some other paperwork. I told him that it sounded like the UST needed to be investigated and wells put in. He said that may be the answer. 7/21/06 - Raphael Ketani. I spoke to Mr. Sigona regarding the site. He said that his investigation and cleanup reached the point where he felt no further action was necessary. I told him that since the former coal storage pit had #6 oil on water and since the #6 oil tank hadn't recently been tested, the DEC believes that soil borings and well installations are necessary between the tanks and outside the building, and a tightness test is necessary. I told him that I will send a letter to Mr. Glen Barnstable instructing the College to do the additional investigation and testing. 7/25/06 - Raphael Ketani. I sent a letter to Mr. Glen Barnstable of the College at Mt. St. Vicent ordering the college to do a more extensive environmental investigation with #6 fuel oil tank and system testing, well installation around the tank and outside the building, oil and water sampling, checking the boilers for leaks, checking the pipes in the trench in the boiler room, cleaning drains and sumps, and removal of oil contaminated soil from the bottom of the former coal storage room. A Best

**MOUNT SAINT VINCENT (Continued)** **U001835537**

Management Plan will have to be set
up. They have one month from the date of completion of the
investigation to get me the report.
8/10/06 - Raphael Ketani. A meeting was held between Mr. Barnstable of the management company for
the College, Mr. Sigona of Fenley & Nicol, and myself. We discussed the conditions past and present
at the site, my 7/25/06 letter, and what DEC is requiring to
investigate the situation. Mr. Sigona
gave me a copy of the tank registration for Hayes Auditorium, which is served by the boiler room
and associated 20,000 gal. #4 fuel oil tank. He also gave me a copy of the successful tank and
system test from 2003 for the 20,000 gal. tank, and pictures that were taken 8/8/06 of the inside
of the second floor room and the boiler room below. The pictures showed that the sump, former coal
pit and pipe trench were all cleaned. They also showed oil staining on two adjacent walls in the
second floor room which are directly above the position of the sump pit in the boiler room. I was
told no one knows what failed and caused the staining. Mr. Barnstable said that this happened
before he came on board to manage things. He said he started work 9 months ago and had a service
person break open two sealed doors to the former coal storage room in order to see what was in
side. At that moment (fall 2005), he said, he saw the oil floating on the water in the coal room.
Mr. Barnstable said that the water may be condensation (excess heating system water) that is
normally discharged to the sump pit. However, the sump pump wasn't working at the time. He said
that with the combination of the leaked oil and the condensation, that's how the College had the
oil floating on the water. He added that the 275 gallon tank near the former coal storage room
contains heating system makeup water for the boilers, not oil. Mr. Sigona commented that the 20,000
gal. UST is outside the services/utility building where the site is contained. He added that the
sump pit, the floor drains, and the coal room are all connected as one drainage system. Mr. Sigona
said that there is no water or oil now. Subsequent to our meeting, I asked for 3 things to be done
as part of the investigation and Mr. Barnstable and Mr. Sigona agreed to these items: 1) perform
one soil boring between the tank and the building and send the most contaminated sample to the
laboratory for 8021 + MTBE analysis only 2) a current tank and system test 3) investigate sump pit
for soil in the bottom and if there is oily soil, then remove the soil; if the floor of the pit is
soil and not concrete or steel, then the floor must be sampled for contamination and if there is
contamination, then the soil has to be removed Mr. Sigona will send me a letter via e-mail

**MOUNT SAINT VINCENT (Continued)** **U001835537**

confirming our agreement. 8/15/06 - Raphael Ketani. I received a FAXed letter containing the minutes and points of agreement from the 8/10/06 meeting with Mr. Barnstable and Mr. Sigona. The points of agreement and minutes were the exact same ones as discussed during the meeting. I left a message for Mr. Sigona stating that the letter was fine and to start work as soon as possible. 9/28/06 - Raphael Ketani. Frank Gorling (631) 586-4900 of Fenley & Nicol left a message and said that he did the boring at the site. He said they went down 19 feet, but didn't hit water. There was refusal at 19 feet and they took a soil sample at 14 feet. His crew went and dug into the sump and hit concrete and there was nothing to clean out (no soil). 9/29/06 - Raphael Ketani. I spoke to Mr. Gorling today regarding the drilling. He said they got one out of the three samples DEC requested. He said the 14 foot sample was sent off to the lab. Mr. Gorling called me back and said that he drilled in the wrong place, at the north end of the tank. I told him DEC and Fenley & Nicol had agreed to have one boring done between the tank and the boiler room. He said he will go back and do the boring in the right place. 10/3/06 - Raphael Ketani. Mr. Gorling left a voice mail. He said that they did the boring between the tank and the wall of the boiler room. He said that there were no odors in the sample. He said that the tank test results came back with a tight tank. 11/10/06 - Raphael Ketani. I tried calling Mr. Gorling, but could only leave a voice mail. 4/5/07 - Raphael Ketani. I contacted Mr. Gorling and told him I hadn't received the closure report. He sounded surprised and apologized. He said he will send a report and I will receive it very soon. 4/16/07 - Raphael Ketani. Today, I received the 11/20/06 Site Investigation Report from Fenley & Nicol. 4/18/07 - Raphael Ketani. I reviewed the SIR and found it to be satisfactory. There was a passing tank tightness test and the soil analyticals showed no hits at all. A copy of the 12/29/05 Spill Cleanup Report was included describing the complete cleanup of the boiler room. They requested an NFA letter. I drafted an NFA for Randall Austin, Chief Spills Engineer Region 2 to review. Based upon my review of the 12/29/05 Spill Cleanup Report, 11/30/06 SIR, the and the other documents in the case file, I am closing the spill case. 5/1/07 - Raphael Ketani. I sent out the NFA letters to Mr. Barnstable and Mr. Sigona today.

Remarks: PBS No: 2-283886

All Materials:
Site ID: 354423
Operable Unit ID: 1111830
Operable Unit: 01
Material ID: 2101877

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 100.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | COLLEGE OF MT ST VINCENT |
| Address: | 6301 RIVERDALE AVENUE |
| City,State,Zip: | NEW YORK, NY 10471-1093 |
| Spill Number/Closed Date: | 0511500 / 2006-01-23 |
| Facility ID: | 0511500 |
| Facility Type: | ER |
| DER Facility ID: | 12536 |
| Site ID: | 357668 |
| DEC Region: | 2 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C3 |
| SWIS: | 0301 |
| Spill Date: | 2006-01-05 |
| Investigator: | JBVOUGHT |
| Referred To: | Not reported |
| Reported to Dept: | 2006-01-05 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2006-01-05 |
| Spill Record Last Update: | 2008-05-23 |
| Spiller Name: | GLENN BARNSTABLE |
| Spiller Company: | COLLEGE OF MT ST VINCENT |
| Spiller Address: | 6301 RIVERDALE AVE |
| Spiller Company: | 001 |
| Contact Name: | GLENN BARNSTABLE |
| Latitude: | 40.9124250 |
| Longitude: | -73.9026770 |
| DEC Memo: | 1/5/06-Vought-Site visit by DEC Vought, DEC Patel and DEC Mohammed. Spill in George Hays Audotorium basement. Spill caused by broken petrometer which was already replaced. Spill on sealed concrete boiler room floor and sump pump and drain was affected. No cracks in concrete and Glenn Barnstable will call back DEC within one hour with contractor name. Vought notified DEP (#1262610) with possible impact to sump and drain. Vought received call from Barnstable that Castle Oil was going to clean spill by calling AL Eastmond for cleanup (718-378-3000). Vought called AL Eastmond (Issac |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

646-879-6703) and he was contacted and sending crew on way. Vought received call and spoke to DEP
Williams regarding site. DEC requires: 1)submission of work invoice (agreed to by Issac Mungra of
Eastmond). 1/23/06-Hiralkumar Patel. DEC Vought received work invoice through fax from Eastmond.
Vought has reviewed invoice and asked me to send out No further action required letter and close
this case. 1/25/06-Vought-NFA letter sent and cc'd to Eastmond.

Remarks: OIL IS IN BOILER ROOM, SUMP PUMP EFFECTED AND DRAIN INVOLVED

All Materials:

| | |
|---|---|
| Site ID: | 357668 |
| Operable Unit ID: | 1114943 |
| Operable Unit: | 01 |
| Material ID: | 2105002 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 100.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | COLLEGE MNT ST VINCENT |
| Address: | 6301 RIVERDALE AVENUE |
| City,State,Zip: | NEW YORK, NY 10471-1093 |
| Spill Number/Closed Date: | 0802000 / 2008-09-22 |
| Facility ID: | 0802000 |
| Facility Type: | ER |
| DER Facility ID: | 12536 |
| Site ID: | 398064 |
| DEC Region: | 2 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C3 |
| SWIS: | 0301 |
| Spill Date: | 2008-05-21 |
| Investigator: | SFRAHMAN |
| Referred To: | Not reported |
| Reported to Dept: | 2008-05-21 |
| CID: | 444 |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | Not reported |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2008-05-21 |
| Spill Record Last Update: | 2008-09-22 |
| Spiller Name: | ROBERT DICE |
| Spiller Company: | COLLEGE MNT ST VINCENT |
| Spiller Address: | 6301 RIVERDALE AVE |
| Spiller Company: | 001 |

**MOUNT SAINT VINCENT (Continued)** **U001835537**

| | |
|---|---|
| Contact Name: | ROBERT DICE |
| Latitude: | 40.9128810 |
| Longitude: | -73.9025700 |
| DEC Memo: | 05/23/08 I responded to the spill site on 05/21/08 afternoon.Spill was in the boiler room, from a filter trap, contained in the boiler room.PTC doing clean up. **PBS expired, tightness testing due** 05/29/08 Spill clean up letter was sent to College of Mount Saint Vincent 6301 Riverdale Avenue Bronx, NY 10471-1093 Attn: Robert Dice 09/04/08 Spoke with Facility Department's secretary, who will relay the messege to Robert Dice to provide DEC the necessary spill clean up report. Few weeks ago, I spoke with Robert Dice and provided him my contact email/fax to send the closure document.(sr) 09/15/08 Tim Drury from the facility called me to request for extension for few days, PTC will visit the site for final assessment of the spill clean up. Tightness testing will be done shortly, with consent from college authority as the managing agent is not sure whether it's their job.(sr) 09/22/08 PTC performed the spill clean up.Spill was in Cardinal Hayes Building.Oil leaked onto the solid concrete floor and into a pit.As per PTC, the floor is in good condition, free of cracks or fault.The oil in the pit was vacuumed out.The oil on the floor was cleaned with absorbent pad followed by pressure wash.The oil line was repaired by the college's boiler maintenance service.Invoice and report in edocs.Case closed. |
| Remarks: | LIONE ON BOILER WAS LOOSE AND WENT INTO BOILER ROOM AND CALLERS ENROUTE TO CLEAN |

All Materials:

| | |
|---|---|
| Site ID: | 398064 |
| Operable Unit ID: | 1154971 |
| Operable Unit: | 01 |
| Material ID: | 2145809 |
| Material Code: | 0002A |
| Material Name: | #4 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 100.00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

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**BG331** **COLLEGE OF MT ST VINCENT** **NY LTANKS S109374770**
**SSW** **6301 RIVERDALE AVE** **NY Spills N/A**
**1/4-1/2** **BRONX, NY**
**0.477 mi.**
**2516 ft.** **Site 2 of 2 in cluster BG**

**Relative:** **Higher**
**Actual:** **157 ft.**

LTANKS:

| | |
|---|---|
| Name: | MT.ST VINCENTS SETON BLDG |
| Address: | 6301 RIVERDALE AVE |
| City,State,Zip: | BRONX, NY |

**COLLEGE OF MT ST VINCENT (Continued)** **S109374770**

| | |
|---|---|
| Spill Number/Closed Date: | 0807008 / 2010-01-22 |
| Facility ID: | 0807008 |
| Site ID: | 404321 |
| Spill Date: | 2008-09-22 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 0301 |
| Investigator: | MXAJOKU |
| Referred To: | Not reported |
| Reported to Dept: | 2008-09-22 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2008-09-22 |
| Spill Record Last Update: | 2010-01-22 |
| Spiller Name: | MARLON JOSEPH |
| Spiller Company: | MT.ST VINCENTS SETON BLDG |
| Spiller Address: | 6301 RIVERDALE AVE |
| Spiller County: | 999 |
| Spiller Contact: | MARLON JOSEPH |
| Spiller Phone: | (718) 624-4842 |
| Spiller Extention: | Not reported |
| DEC Region: | 2 |
| DER Facility ID: | 353944 |
| Latitude: | 40.9128810 |
| Longitude: | -73.9025700 |
| DEC Memo: | This spill report is associated with a 5,000 gal tank at the Seton Hall Building TTF letter sent to: College of Mount St Vincent 6301 Riverdale Ave Bronx, NY 10471 Attn: Matthew McDevitt 10/28/08: Spill no 0807009 has been added to this spill no. b/c both spill cases are at the same facility. (MA) 01/22/2010: The submittals by Petroleum Tank Cleaners dated Augugst 11, 2009 documents tank failure causes and corrective measures undertaken my facility owner in addressing this spill case. In light of the review of the aforementined report document, the spill number(s) associatced with this release is/are hereby closed. See eDocs for details. (MA) |
| Remarks: | 5000 gallon tank failed due to dry portion leak. no spill occured. |

All TTF:

| | |
|---|---|
| Facility ID: | 0807008 |
| Spill Number: | 0807008 |
| Spill Tank Test: | 2486852 |
| Site ID: | 404321 |
| Tank Number: | 009 |
| Tank Size: | 5000 |
| Material: | 0001 |
| EPA UST: | False |
| UST: | False |
| Cause: | 00 |
| Source: | 00 |
| Test Method: | 21 |

**COLLEGE OF MT ST VINCENT (Continued)** **S109374770**

| | |
|---|---|
| Test Method 2: | Horner EZY3/EZY3 Locator Plus |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | MXAJOKU |
| Last Modified Date: | Not reported |

| | |
|---|---|
| Facility ID: | 0807008 |
| Spill Number: | 0807008 |
| Spill Tank Test: | 2486853 |
| Site ID: | 404321 |
| Tank Number: | 006 |
| Tank Size: | 2000 |
| Material: | 0001 |
| EPA UST: | False |
| UST: | False |
| Cause: | 00 |
| Source: | 00 |
| Test Method: | 21 |
| Test Method 2: | Horner EZY3/EZY3 Locator Plus |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | MXAJOKU |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 404321 |
| Operable Unit ID: | 1160986 |
| Operable Unit: | 01 |
| Material ID: | 2152174 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | MT. ST VINCENTS CASTLE BLDG |
| Address: | 6301 RIVERDALE AVE |
| City,State,Zip: | BRONX, NY |
| Spill Number/Closed Date: | 0807009 / 2008-10-28 |
| Facility ID: | 0807009 |
| Site ID: | 404322 |
| Spill Date: | 2008-09-22 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 0301 |
| Investigator: | MXAJOKU |
| Referred To: | Not reported |
| Reported to Dept: | 2008-09-22 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |

**COLLEGE OF MT ST VINCENT (Continued)** **S109374770**

| | |
|---|---|
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2008-09-22 |
| Spill Record Last Update: | 2008-10-28 |
| Spiller Name: | MARLON JOSEPH |
| Spiller Company: | MT. ST VINCENTS CASTLE BLDG |
| Spiller Address: | 6301 RIVERDALE AVE |
| Spiller County: | 999 |
| Spiller Contact: | MARLON JOSEPH |
| Spiller Phone: | (718) 624-4842 |
| Spiller Extention: | Not reported |
| DEC Region: | 2 |
| DER Facility ID: | 353946 |
| Latitude: | 40.9128810 |
| Longitude: | -73.9025700 |
| DEC Memo: | This spill report is associated with a 2,000 gal tank at the Castle Building . TTF letter sent to: College of Mount St Vincent 6301 Riverdale Ave Bronx, NY 10471 Attn: Matthew McDevitt 10/28/08: This spill no. is closed b/c there is another open spill at the same facility. This spill no. is hereby linked to spill no 0807008. (MA) |
| Remarks: | 5000 gallon fuel tank failed due to a dry portion leak, no product was spilled. |

All Materials:

| | |
|---|---|
| Site ID: | 404322 |
| Operable Unit ID: | 1160987 |
| Operable Unit: | 01 |
| Material ID: | 2152175 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | MT. ST VINCENTS SCHOOL - SPELLMAN BLDG |
| Address: | 6301 RIVERDALE AVE |
| City,State,Zip: | BRONX, NY |
| Spill Number/Closed Date: | 1113142 / 2012-03-21 |
| Facility ID: | 1113142 |
| Facility Type: | ER |
| DER Facility ID: | 352859 |
| Site ID: | 461119 |
| DEC Region: | 2 |
| Spill Cause: | Human Error |
| Spill Class: | D4 |
| SWIS: | 0301 |
| Spill Date: | 2012-02-17 |
| Investigator: | RMPIPER |
| Referred To: | Not reported |

**COLLEGE OF MT ST VINCENT (Continued)** **S109374770**

| | |
|---|---|
| Reported to Dept: | 2012-02-17 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Institutional, Educational, Gov., Other |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2012-02-17 |
| Spill Record Last Update: | 2012-03-21 |
| Spiller Name: | MB FUEL TRANSPORT |
| Spiller Company: | MB FUEL TRANSPORT |
| Spiller Address: | 6301 RIVERDALE AVE |
| Spiller Company: | 999 |
| Contact Name: | MB FUEL TRANSPORT |
| Latitude: | 40.9128810 |
| Longitude: | -73.9025700 |
| DEC Memo: | overfill out vent. riteway to clean, powerwash. followup needed, DEC Piper performed site visit. #2<br>oil spill excavated by royal Env. During excation, #4 oil observed on groundwater. Spill 1113487<br>assigned to new discovery. #2 oil cleanup requirements have been met. 1113142 spill closed. |
| Remarks: | Fuel sprayed out of vent pipe during delivery. Cleanup (ABC) is enroute. |

All Materials:

| | |
|---|---|
| Site ID: | 461119 |
| Operable Unit ID: | 1211213 |
| Operable Unit: | 01 |
| Material ID: | 2208920 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 5.00 |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | COLLEGE OF MT SAINT VINCENT |
| Address: | 6301 RIVERDALE AVE |
| City,State,Zip: | BRONX, NY |
| Spill Number/Closed Date: | 0806348 / 2008-09-16 |
| Facility ID: | 0806348 |
| Facility Type: | ER |
| DER Facility ID: | 352859 |
| Site ID: | 403630 |
| DEC Region: | 2 |
| Spill Cause: | Human Error |
| Spill Class: | C4 |
| SWIS: | 0301 |
| Spill Date: | 2008-09-05 |
| Investigator: | RMPIPER |

**COLLEGE OF MT ST VINCENT (Continued)** **S109374770**

| | |
|---|---|
| Referred To: | Not reported |
| Reported to Dept: | 2008-09-05 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Tank Truck |
| Spill Notifier: | Responsible Party |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2008-09-05 |
| Spill Record Last Update: | 2009-10-23 |
| Spiller Name: | BOB DICE |
| Spiller Company: | COLLE OF MT ST VINCENT |
| Spiller Address: | 6301 RIVERDALE AVE |
| Spiller Company: | 999 |
| Contact Name: | BOB DICE |
| Latitude: | 40.9128810 |
| Longitude: | -73.9025700 |
| DEC Memo: | Spill due to over fill. Castle removed 4 drums of soil and cleaned building wall. There was no release in the basement. Closed. |
| Remarks: | Customer directed company to wrong stick well to get correct reading.Therefore causing spill. |

All Materials:

| | |
|---|---|
| Site ID: | 403630 |
| Operable Unit ID: | 1160317 |
| Operable Unit: | 01 |
| Material ID: | 2151482 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | 6.00 |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | COLLEGE OF MT ST VINCENT |
| Address: | 6301 RIVERDALE AVE |
| City,State,Zip: | BRONX, NY |
| Spill Number/Closed Date: | 1005322 / 2010-08-11 |
| Facility ID: | 1005322 |
| Facility Type: | ER |
| DER Facility ID: | 352859 |
| Site ID: | 438636 |
| DEC Region: | 2 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C4 |
| SWIS: | 0301 |
| Spill Date: | 2010-08-11 |
| Investigator: | smsanges |
| Referred To: | Not reported |
| Reported to Dept: | 2010-08-11 |

**COLLEGE OF MT ST VINCENT (Continued)** **S109374770**

| | |
|---|---|
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Commercial Vehicle |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | False |
| Last Inspection: | Not reported |
| Recommended Penalty: | Not reported |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2010-08-11 |
| Spill Record Last Update: | 2010-08-11 |
| Spiller Name: | Not reported |
| Spiller Company: | UGL UNICCO |
| Spiller Address: | Not reported |
| Spiller Company: | 999 |
| Contact Name: | ROBERT DICE |
| Latitude: | 40.9128810 |
| Longitude: | -73.9025700 |
| DEC Memo: | Steam Roller on site broke a hydraulic line. couple of gallons spilled. Most to pavement some in a drain. PTC on site doing cleanup. PTC is also cleaning out the drain. |
| Remarks: | spill to paved surface/site area contained/petro tank cleaners en route for clean up |

All Materials:

| | |
|---|---|
| Site ID: | 438636 |
| Operable Unit ID: | 1189286 |
| Operable Unit: | 01 |
| Material ID: | 2184241 |
| Material Code: | 0010 |
| Material Name: | hydraulic oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | G |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**BF332** **SPILL NUMBER 9807402** **NY LTANKS** **S104619689**
**SE** **88-90 SARATOGA AVE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.492 mi.**
**2599 ft.** **Site 2 of 3 in cluster BF**

**Relative:** **Higher**
**Actual:** **112 ft.**

LTANKS:

| | |
|---|---|
| Name: | SPILL NUMBER 9807402 |
| Address: | 88-90 SARATOGA AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9807402 / 1998-12-30 |
| Facility ID: | 9807402 |
| Site ID: | 180428 |
| Spill Date: | 1998-09-15 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |

**SPILL NUMBER 9807402 (Continued)** **S104619689**

| | |
|---|---|
| SWIS: | 6018 |
| Investigator: | WCHD |
| Referred To: | Westchester Cnty Health Dept |
| Reported to Dept: | 1998-09-16 |
| CID: | 199 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1998-09-16 |
| Spill Record Last Update: | 1999-02-18 |
| Spiller Name: | Not reported |
| Spiller Company: | Not reported |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | TARRICONE FUEL |
| Spiller Phone: | (914) 693-1132 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 151332 |
| Latitude: | 40.9146149 |
| Longitude: | -73.8933951 |
| DEC Memo: | Not reported |
| Remarks: | TANK PASSED RETEST. |

All TTF:

| | |
|---|---|
| Facility ID: | 9807402 |
| Spill Number: | 9807402 |
| Spill Tank Test: | 1546259 |
| Site ID: | 180428 |
| Tank Number: | 1 |
| Tank Size: | 2000 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 180428 |
| Operable Unit ID: | 1068472 |
| Operable Unit: | 01 |
| Material ID: | 318491 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |

**SPILL NUMBER 9807402 (Continued)** **S104619689**

Units: G
Recovered: .00
Oxygenate: Not reported

---

**BF333** **SPILL NUMBER 9808503** **NY LTANKS** **S104619739**
**SE** **88 AND 90 SARATOGA AVE** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.492 mi.**
**2599 ft.** **Site 3 of 3 in cluster BF**

**Relative:**
**Higher**

**Actual:**
**112 ft.**

LTANKS:

| | |
|---|---|
| Name: | SPILL NUMBER 9808503 |
| Address: | 88 AND 90 SARATOGA AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9808503 / 2004-04-30 |
| Facility ID: | 9808503 |
| Site ID: | 104582 |
| Spill Date: | 1998-10-08 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | C4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | WCHD |
| Referred To: | Westchester Cnty Health Dept |
| Reported to Dept: | 1998-10-08 |
| CID: | 382 |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1998-10-08 |
| Spill Record Last Update: | 2004-04-30 |
| Spiller Name: | JACK NOGUEIRA |
| Spiller Company: | Not reported |
| Spiller Address: | 88 AND 90 SARATOGA AVE |
| Spiller County: | 001 |
| Spiller Contact: | JIM ROOD |
| Spiller Phone: | (914) 345-5700 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 92381 |
| Latitude: | 40.9145380 |
| Longitude: | -73.8933647 |
| DEC Memo: | Not reported |
| Remarks: | GROSS FAILURE. UNCOVER THE TANK THEN A RETEST. |

All TTF:

| | |
|---|---|
| Facility ID: | 9808503 |
| Spill Number: | 9808503 |
| Spill Tank Test: | 1546365 |
| Site ID: | 104582 |
| Tank Number: | 1 |
| Tank Size: | 2000 |

**SPILL NUMBER 9808503 (Continued)** **S104619739**

| | |
|---|---|
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 03 |
| Test Method 2: | Horner EZ Check I or II |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 104582 |
| Operable Unit ID: | 1069697 |
| Operable Unit: | 01 |
| Material ID: | 316007 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | G |
| Recovered: | .00 |
| Oxygenate: | Not reported |

---

**334**
**NNE**
**1/4-1/2**
**0.495 mi.**
**2616 ft.**

**YONKERS MOTORS** **NY LTANKS** **S101650853**
**210 SOUTH BROADWAY** **N/A**
**YONKERS, NY**

**Relative:**
**Higher**

**Actual:**
**104 ft.**

LTANKS:

| | |
|---|---|
| Name: | YONKERS MOTORS |
| Address: | 210 SOUTH BROADWAY |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 9304771 / 1995-02-17 |
| Facility ID: | 9304771 |
| Site ID: | 330549 |
| Spill Date: | 1993-07-15 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | B3 |
| Cleanup Ceased: | 1995-02-17 |
| SWIS: | 6018 |
| Investigator: | WXWADSWO |
| Referred To: | Not reported |
| Reported to Dept: | 1993-07-15 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |

**YONKERS MOTORS (Continued)** **S101650853**

| | |
|---|---|
| Date Entered In Computer: | 1993-07-27 |
| Spill Record Last Update: | 1995-03-09 |
| Spiller Name: | Not reported |
| Spiller Company: | SAME |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 265884 |
| Latitude: | 40.9246780 |
| Longitude: | -73.8953887 |
| DEC Memo: | Prior to Sept, 2004 data translation this spill Lead_DEC Field was WADSWORTH 09/27/95: This is additional information about material spilled from the translation of the old spill file: TANK TEST. |
| Remarks: | EXCAVATING SAMPLING REFER TO PBS PETRO-TITE |

All TTF:

| | |
|---|---|
| Facility ID: | 9304771 |
| Spill Number: | 9304771 |
| Spill Tank Test: | 1541773 |
| Site ID: | 330549 |
| Tank Number: | Not reported |
| Tank Size: | 0 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 330549 |
| Operable Unit ID: | 983058 |
| Operable Unit: | 01 |
| Material ID: | 398249 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | .00 |
| Units: | Not reported |
| Recovered: | .00 |
| Oxygenate: | Not reported |

**335**
**ESE**
**1/4-1/2**
**0.496 mi.**
**2618 ft.**

**APARTMENT BLDG - TTF**
**502 VAN CORTLANDT PARK AVE**
**YONKERS, NY**

**NY LTANKS** **S118707862**
**N/A**

**Relative:**
**Higher**

**Actual:**
**84 ft.**

LTANKS:

| | |
|---|---|
| Name: | APARTMENT BLDG - TTF |
| Address: | 502 VAN CORTLANDT PARK AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1604887 / 2019-03-07 |
| Facility ID: | 1604887 |
| Site ID: | 531413 |
| Spill Date: | 2016-08-11 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D3 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | JBODEE |
| Referred To: | Not reported |
| Reported to Dept: | 2016-08-12 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2016-08-12 |
| Spill Record Last Update: | 2019-03-07 |
| Spiller Name: | Not reported |
| Spiller Company: | The Easton Group |
| Spiller Address: | 502 VAN CORTLANDT PARK AVE |
| Spiller County: | 001 |
| Spiller Contact: | Elinne Dominguez |
| Spiller Phone: | 305-487-2147 |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 485472 |
| Latitude: | Not reported |
| Longitude: | Not reported |
| DEC Memo: | 8/12/16 Spoke to Mr. Scorzelli, who did the tank test for a prospective buyer, and has no idea who the property owner is. dw 8/19/16: Call to the dispatch desk from Elinne Dominguez. She states she is the owner's daughter. Property is for sale and she says she was informed by a prospective buyer that the UST is leaking. She states this is an apartment building - was reported as a residential home. She also states she believes the UST is 5K gallons in size, and is the original tank for this building. Contractor list sent. She will get estimates on retest/removal and update DEC at a later date. jod 9/08/16: Owner Elinne Dominguez sent me an email inquiring about soil sampling and in-place abandonment. DEC still awaiting confirmation on the tank size. jod 5/16/17: Email received from property owner, entered into DecDocs. Message sent requesting information on the work performed. jod *Owner Elinne Dominguez emailed DEC stating: The name of the contractor that performed the work is Castleton Enviornmental. It was completed a couple of weeks |

**APARTMENT BLDG - TTF (Continued)** **S118707862**

ago so will reach out to the buyer to see what's going on. I have not received a copy of the report but did get a verbal on this. **Email sent to Castlton requesting a copy of the tank report. jod 5/18/17: Castlton replied stating they have no record of performing any work at this address. jod 11/14/18: Email sent to Elinne Dominguez requesting a copy of the closure report, or any additional information. jod *Email to Elinne Dominguez returned as undeliverable. jod 3/07/19: This property was sold in Sept 2017. The UST was removed and replaced by an unknown contractor at some point between Sept 2016 and May of 2017. DEC was never able to confirm the UST size but it was never registered with Westchester County PBS. It was reported to DEC that when the tank was removed it was not leaking - no TCR was ever received. Spill administratively closed at this time. jod

Remarks: tank test failure

All Materials:

| | |
|---|---|
| Site ID: | 531413 |
| Operable Unit ID: | 1280192 |
| Operable Unit: | 01 |
| Material ID: | 2285328 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

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**336** **DELLOS SANTOS TTF** **NY LTANKS** **S111836540**
**NNE** **54 CAROLINE AVE** **NY Spills** **N/A**
**1/4-1/2** **YONKERS, NY**
**0.499 mi.**
**2633 ft.**

**Relative:** **Higher**
**Actual:** **144 ft.**

LTANKS:

| | |
|---|---|
| Name: | DELLOS SANTOS TTF |
| Address: | 54 CAROLINE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1201227 / 2012-09-10 |
| Facility ID: | 1201227 |
| Site ID: | 463907 |
| Spill Date: | 2012-05-07 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Private Dwelling |
| Spill Class: | D4 |
| Cleanup Ceased: | Not reported |
| SWIS: | 6018 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2012-05-07 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |

**DELLOS SANTOS TTF (Continued)** **S111836540**

| | |
|---|---|
| Meets Standard: | True |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2012-05-07 |
| Spill Record Last Update: | 2012-09-11 |
| Spiller Name: | Not reported |
| Spiller Company: | ORESTES DE LOS SANTOS |
| Spiller Address: | Not reported |
| Spiller County: | 999 |
| Spiller Contact: | OWNER |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 3 |
| DER Facility ID: | 418295 |
| Latitude: | 40.9267317 |
| Longitude: | -73.8974085 |
| DEC Memo: | 5/7/12 Owner will be repairing and retesting. dw 5/15/12- US Tank Tech reports that tank failed retest. Lines still hissing and fittings were still loose. Further action unknown at this time. DT 09/09/12 Castlton Environmental contractors reported that they excavated and removed the tank along with 3.49 tons of contaminated soil. Post excavation soil sample results were below DEC guidance values. NFA. TG |
| Remarks: | ttf |

All Materials:

| | |
|---|---|
| Site ID: | 463907 |
| Operable Unit ID: | 1213996 |
| Operable Unit: | 01 |
| Material ID: | 2212012 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

SPILLS:

| | |
|---|---|
| Name: | DELLOS SANTOS RESIDENCE |
| Address: | 54 CAROLINE AVE |
| City,State,Zip: | YONKERS, NY |
| Spill Number/Closed Date: | 1203568 / 2012-09-10 |
| Facility ID: | 1203568 |
| Facility Type: | ER |
| DER Facility ID: | 418295 |
| Site ID: | 466396 |
| DEC Region: | 3 |
| Spill Cause: | Equipment Failure |
| Spill Class: | C4 |
| SWIS: | 6018 |
| Spill Date: | 2012-07-12 |
| Investigator: | TDGHIOSA |
| Referred To: | Not reported |
| Reported to Dept: | 2012-07-12 |

**DELLOS SANTOS TTF (Continued)** **S111836540**

| | |
|---|---|
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Source: | Private Dwelling |
| Spill Notifier: | Other |
| Cleanup Ceased: | Not reported |
| Cleanup Meets Std: | True |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| UST Trust: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2012-07-12 |
| Spill Record Last Update: | 2012-09-10 |
| Spiller Name: | ORESTE DELSANTOS |
| Spiller Company: | PROPERTY OWNER |
| Spiller Address: | 54 CAROLINE AVE |
| Spiller Company: | 999 |
| Contact Name: | JESSE DEGIRONIMO |
| Latitude: | 40.9267317 |
| Longitude: | -73.8974085 |
| DEC Memo: | 7/12/12 Waiting on insurance companies decision on coverage...mm 09/09/12 Castlton Environmental contractors reported that they excavated and removed the tank along with 3.49 tons of contaminated soil. Post excavation soil sample results were below DEC guidance values. NFA. TG |
| Remarks: | Removing old tank, discovered soil contamination. |

All Materials:

| | |
|---|---|
| Site ID: | 466396 |
| Operable Unit ID: | 1216394 |
| Operable Unit: | 01 |
| Material ID: | 2214576 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

---

**337 SSW 1/2-1 0.749 mi. 3957 ft.** **\\HEBREW HOME FOR THE AGED** **NY LTANKS** **S121988498**
**5901 PALISADE AV** **NY NYC OER** **N/A**
**BRONX, NY**

**Relative: Higher**
**Actual: 144 ft.**

LTANKS:

| | |
|---|---|
| Name: | \\HEBREW HOME FOR THE AGED |
| Address: | 5901 PALISADE AV |
| City,State,Zip: | BRONX, NY |
| Spill Number/Closed Date: | 8907575 / 1992-11-02 |
| Facility ID: | 8907575 |
| Site ID: | 199643 |
| Spill Date: | 1989-10-30 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Institutional, Educational, Gov., Other |

**\\HEBREW HOME FOR THE AGED (Continued)** **S121988498**

| | |
|---|---|
| Spill Class: | C4 |
| Cleanup Ceased: | 1992-11-02 |
| SWIS: | 0301 |
| Investigator: | BATTISTA |
| Referred To: | Not reported |
| Reported to Dept: | 1989-10-30 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Tank Tester |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 1989-11-03 |
| Spill Record Last Update: | 2002-06-13 |
| Spiller Name: | Not reported |
| Spiller Company: | JIM KEEGAN |
| Spiller Address: | Not reported |
| Spiller County: | 001 |
| Spiller Contact: | Not reported |
| Spiller Phone: | Not reported |
| Spiller Extention: | Not reported |
| DEC Region: | 2 |
| DER Facility ID: | 166174 |
| Latitude: | 40.9083223 |
| Longitude: | -73.9089476 |
| DEC Memo: | Not reported |
| Remarks: | 7.5K TANK FAILED. L R = -1.044 GPH. |

All TTF:

| | |
|---|---|
| Facility ID: | 8907575 |
| Spill Number: | 8907575 |
| Spill Tank Test: | 1536335 |
| Site ID: | 199643 |
| Tank Number: | Not reported |
| Tank Size: | 0 |
| Material: | 0001 |
| EPA UST: | Not reported |
| UST: | Not reported |
| Cause: | Not reported |
| Source: | Not reported |
| Test Method: | 00 |
| Test Method 2: | Unknown |
| Leak Rate: | .00 |
| Gross Fail: | Not reported |
| Modified By: | Spills |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 199643 |
| Operable Unit ID: | 932530 |
| Operable Unit: | 01 |
| Material ID: | 444363 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |

**\\HEBREW HOME FOR THE AGED (Continued)** **S121988498**

| | |
|---|---|
| Material FA: | Petroleum |
| Quantity: | -1.00 |
| Units: | L |
| Recovered: | .00 |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | TANK FAILURE |
| Address: | 5901 PALISADE AVE |
| City,State,Zip: | BRONX, NY |
| Spill Number/Closed Date: | 1809325 / 2018-12-05 |
| Facility ID: | 1809325 |
| Site ID: | 580164 |
| Spill Date: | 2018-12-05 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | Not reported |
| Cleanup Ceased: | Not reported |
| SWIS: | 0301 |
| Investigator: | HRPATEL |
| Referred To: | Not reported |
| Reported to Dept: | 2018-12-05 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2018-12-05 |
| Spill Record Last Update: | 2018-12-05 |
| Spiller Name: | DARWIN AULESTIA |
| Spiller Company: | HEBREW HOME AT RIVERDALE |
| Spiller Address: | 5901 PALISADE |
| Spiller County: | 999 |
| Spiller Contact: | JOHN BONANNO |
| Spiller Phone: | (631) 339-3468 |
| Spiller Extention: | Not reported |
| DEC Region: | 2 |
| DER Facility ID: | 532800 |
| Latitude: | 40.9102198 |
| Longitude: | -73.9087510 |
| DEC Memo: | 12/05/18-Hiralkumar Patel. duplicate spill. refer to spill #: 1809324 for further details. case closed administratively. |
| Remarks: | tank test failure |

All TTF:

| | |
|---|---|
| Facility ID: | 1809325 |
| Spill Number: | 1809325 |
| Spill Tank Test: | 2506385 |
| Site ID: | 580164 |
| Tank Number: | 005/5931 |
| Tank Size: | 500 |
| Material: | 0001 |
| EPA UST: | False |
| UST: | True |
| Cause: | 00 |

**\\HEBREW HOME FOR THE AGED (Continued)** **S121988498**

| | |
|---|---|
| Source: | 00 |
| Test Method: | - |
| Test Method 2: | Not reported |
| Leak Rate: | Not reported |
| Gross Fail: | Not reported |
| Modified By: | HRPATEL |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 580164 |
| Operable Unit ID: | 1327879 |
| Operable Unit: | 01 |
| Material ID: | 2336808 |
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

| | |
|---|---|
| Name: | TANK FAILURE |
| Address: | 5901 PALISADE AVE |
| City,State,Zip: | BRONX, NY |
| Spill Number/Closed Date: | 1809324 / 2019-11-22 |
| Facility ID: | 1809324 |
| Site ID: | 580163 |
| Spill Date: | 2018-12-05 |
| Spill Cause: | Tank Test Failure |
| Spill Source: | Commercial/Industrial |
| Spill Class: | Not reported |
| Cleanup Ceased: | Not reported |
| SWIS: | 0301 |
| Investigator: | HSSEKHON |
| Referred To: | Not reported |
| Reported to Dept: | 2018-12-05 |
| CID: | Not reported |
| Water Affected: | Not reported |
| Spill Notifier: | Other |
| Last Inspection: | Not reported |
| Recommended Penalty: | False |
| Meets Standard: | False |
| UST Involvement: | False |
| Remediation Phase: | 0 |
| Date Entered In Computer: | 2018-12-05 |
| Spill Record Last Update: | 2019-11-22 |
| Spiller Name: | DARWIN AULESTIA |
| Spiller Company: | HEBREW HOME AT RIVERDALE |
| Spiller Address: | 5901 PALISADE AVE |
| Spiller County: | 999 |
| Spiller Contact: | JOHN BONANNO |
| Spiller Phone: | (631) 339-3468 |
| Spiller Extention: | Not reported |
| DEC Region: | 2 |
| DER Facility ID: | 532800 |

**\\HEBREW HOME FOR THE AGED (Continued)** **S121988498**

Latitude: 40.9102198
Longitude: -73.9087510
DEC Memo: 12/05/18-Hiralkumar Patel. alternate address: 5941 Palisade Ave PBS #: 2-478873. as per PBS record, the site has/had following tanks: - one (1) 25,000 gal #2 oil UST, closed-in-place in June 1991 - one (1) 7,500 gal #2 oil UST, closed-in-place in June 1991 - one (1) 2,500 gal #2 oil UST, closed-in-place in June 1991 - one (1) 4,000 gal #2 oil UST, closed-in-place in June 1991 - one (1) 15,000 gal #2 oil UST, closed-in-place in June 1991 - one (1) 20,000 gal #2 oil AST in vault, in-service, installed in July 1991 - one (1) 7,500 gal #2 oil AST in vault, in-service, installed in July 1991 - one (1) 2,500 gal #2 oil AST in vault, in-service, installed in July 1991 - one (1) 275 gal #2 oil UST, in-service, installed in Jan. 1966 - one (1) 500 gal #2 oil UST, in-service, installed in Jan. 1986 - one (1) 275 gal #2 oil AST, in-service, installed in Jan. 2005 - one (1) 2,000 gal #2 oil AST, in-service, installed in Jan. 2005 other spills #: 8907376, 8907575, 8908038, 1411325, 1809325 spill #: 8907376 was reported on 10/25/1989 as 15,000 gal #2 oil tank failed a tightness test. case closed. spill #: 8907575 was reported on 10/30/1989 as 7,500 gal #2 oil tank failed a tightness test. case closed. spill #: 8908038 was reported on 11/13/1989 as 25,000 gal #2 oil tank failed a tightness test. case closed. spill #: 1411325 was reported on 03/02/2015 as contamination found during Phase II investigation. case closed based on results of soil and groundwater samples. spill #: 1809325 was reported on 12/05/2018 as 500 gal #2 oil UST failed a tightness test. 1:39 PM:- left message for John. 2:04 PM:- spoke with Darwin Aulestia at Hebrew Home. he mentioned that DEC PBS unit required tightness testing of two existing underground tank systems: one 275 gal (tank #: 004/5921) and one 500 gal (tank #: 005/5931). both tanks are used for emergency generator. the 275 gal tank is currently in use. technician believes that leak in 275 gal tank is due to loose connection. Mr. Aulestia is waiting for proposal for isolation test. informed Mr. Aulestia that the department requires immediate removal of remaining oil from the 275 gal tank unless no leak confirmed in wet portion of the tank. the 500 gal tank is currently out-of-service as that part of building is under renovation and not occupied. the tank was pumped out in summer of 2018. the 500 gal tank system will be removed. The Hebrew Home For The Aged At Riverdale **property owner** 5901 Palisade Avenue Bronx, NY 10471 Attn.: Darwin Aulestia Engineering Assistant Director Ph. (718) 581-1367/1369 email: Darwin.aulestia@hebrewhome.org based on discussion with Mr. Aulestia, spill #: 1809325 was closed administratively and merged with the subject spill case. 2:53 PM:- sent TTF letter to Mr. Aulestia for both tank systems. letter emailed to Mr. Aulestia and DEC Lakhani. case assigned to DEC Lakhani. 12/18/18 - Lakhani AARCO is removing the 275 gallons and 550 gallons USTs. 12/19/18 - Lakhani 30 day notification submitted to PBS to remove the two (2) USTs. 01/18/19 - Lakhani DEC Lakhani visited the site. AARCO was on site removing the 275 gallons and 550 gallons UST. The 275 gallon tank installed in 1966 was removed. There was a 1 diameter hole in the bottom of the tank. The excavation was dug to 10’bg. It is not feasible to go further due to the foundation of the building. DEC Lakhani advised that at least three (3) endpoint samples be collected: bottom and two (2) sidewalls. PID readings of the bottom of the excavation and sidewall were approx. 200 ppm and 140 ppm respectively. The 550 gallon tanks was not yet removed because it is buried deep. AARCO excavated to 6’bg and the tank top was not yet encountered. However,

**\\HEBREW HOME FOR THE AGED (Continued)** **S121988498**

soils at 6' began displaying evidence of impact. PID readings at this depth were approx. 200 ppm. Further investigation revealed that the return line for the 550 gallon tank has corroded leaving a hole in the pipe. AARCO will return on another day to remove the 550 gallon tank. 02/11/19-Hiralkumar Patel. 10:54 AM:- received call from Mallarie White from AARCO Env. requesting DEC presence during removal of 550 gal tank on 02/14/19. due to scheduling conflict, requested Mallarie to reschedule tank removal work. asked her to submit result of endpoint samples collected after removal of 275 gal tank. 11:35 AM:- received email from Mallarie including endpoint sample result for 275 gal tank excavation. three endpoint soil samples were collected: one bottom sample at 10 ft bg, one sidewall sample from south sidewall at 8 ft bg, and one sidewall sample from east sidewall at 8 ft bg. soil analyticals (in ppb):
----------Bottom-------South--------East 10 ft 8 ft 8 ft Toluene----------520-------4,700
Ethylbenzene----------7,700------11,000-------1,600
Xylene----------4,700------35,000-------5,000
1,2,4-Trimethylbenzene-------11,000------51,000------12,000
1,3,5-Trimethylbenzene--------1,300------11,000-------2,800
Naphthalene----------11,000------12,000-------4,400 Mallarie White AARCO Environmental Ph. (631) 586-5900 email: mwhite@aarcoenvironmental.com DEC Lakhani visited the site on 01/18/19 and noted no feasibility of further excavation at 275 gal tank location due to existing building foundation. 2:12 PM:- spoke with Mallarie. she mentioned that excavation of 275 gal tank has been backfilled as sidewalls were collapsing. 2:38 PM:- received call from Mallarie. she rescheduled 550 gal tank removal on 02/21/19. 02/15/19-Hiralkumar Patel. 12:02 PM:- received email from Mallarie stating that field work (tank removal and soil borings) has been rescheduled on 02/28/19. 02/28/19-Hiralkumar Patel. 8:30 AM:- visited site and witnessed installation of soil borings to delineate petroleum contamination noted at the former 275 gal UST location. total of five (5) soil borings (SB1 through SB5) were installed at/around former 275 gal UST location. borings SB1 and SB2 were installed at the former 275 gal tank location. as refusal encountered at 13 ft bg with petroleum odors from 10-13 ft interval during installation of boring SB1, an additional boring SB2 was installed in former tank location, to the north of SB1. boring SB2 was advanced to a depth of 23 ft bg where refusal encountered. some groundwater was noted at 23 ft depth in SB2. oil was noted (upto 349 ppm on PID) in soil column at 10-15 ft bg in SB2. based on field observations, no soil samples were collected from boring SB1, but two soil samples were collected from boring SB2: at 10-15 ft and 23 ft bg. boring SB3 was installed to the north of the former 275 gal tank location. refusal encountered at 16.5 ft bg. no petroleum odors were noted from surface to 14.5 bg, but some petroleum odors (with max. of 20 ppm on PID) were noted in 14.5-15 ft interval. based on field observations, no soil samples were collected from SB3. boring SB4 was installed in dirt slope area to the south of the former 275 gal tank location. refusal encountered at 16.5 ft bg. contamination was noted below 8 ft depth with over 400 ppm on PID near 10 ft depth. 243 ppm was recorded on PID at refusal depth. soil samples were collected at 10 and 15 ft depths. boring SB5 was installed to the east of the former 275 gal tank location. refusal was encountered at 15 ft bg. no signs of contamination were noted in boring SB5. no soil samples were collected from SB5. also observed removal of 550 gal UST, which was

**\\HEBREW HOME FOR THE AGED (Continued)** **S121988498**

also located adjacent to building's foundation wall. the tank top was noted below 6 ft depth. stained soil was noted near the tank top along the foundation wall. noted heavily corroded return line with multiple large holes. a concrete pad was noted beneath the tank. an I-beam was found at the north end of the tank. the beam was not supporting any structure overhead. approx. 15 inches wide gap was noted between the concrete pad and building foundation wall. noted heavily contaminated soil within this gap. based on field observations, it appears that any oil leaked from the corroded return line must have migrated downward along the building foundation wall through this gap. the building has two story sub-grade garage and the concrete pad beneath the 550 gal UST was near the base of the 1st level garage. 03/05/19-Hiralkumar Patel. 8:49 AM:- sent email to Mallarie. informed her that based on field observations, the Department requires further soil and groundwater investigation at the former 275 gal UST location via installation of at least one permanent monitoring well at the former tank location and additional soil borings/monitoring wells to the south of the tank location. also informed her that additional investigation/remediation may be required at the 550 gal UST location, upon review of endpoint samples collected after tank s removal. email copied to DEC Lakhani. 03/11/19 - Lakhani Sent the following email to AARCO Tara Boggs: In the location of the 275 gallon UST, further delineation is required. One (1) permanent monitoring well is required in the location of the former 275 gallon UST. A 4 well is preferred. Additional soil borings are also required to the south of the former tank location. Bedrock is rather shallow in the area and so there is no need to advance past the bedrock when encountered. Before borings are installed, please perform a mark out of the area to avoid damaging any pipes or lines. I do not want to require anything for the 550 gallon UST without reviewing the endpoint sample results from the excavation. However, from seeing the corroded return line I can only imagine that further delineation will be necessary. 05/06/19 - Lakhani Preferred Environmental will be working this project with AARCO. The two (2) tanks were removed and further delineation was required in the area of the 275 gallons UST. The mark-out has been completed. The 275 gallons tank was removed in January 2019. Based on the endpoint sample results, the further delineation was required. AARCO remobilized to the site to complete additional soil delineation. Based on those results DEC Lakhani required further delineation. On 05/09/19, one (1) 4 permanent monitoring well will be installed. Additional soil borings will also be installed to the south of the former 275 gallon tank. The 550 gallon UST was removed in February 2019. 28 cubic yards of impacted soil were removed. Excavation endpoint samples were collected and revealed that there is no need for additional delineation/remediation. 05/30/19 - Lakhani Borings SB-6 and SB-7 were installed south of the former 275 gallon UST. Samples were collected at 7'-8'bg and 10'-11'bg respectively. The samples were non-detect and for CP-51. PID readings were also between 0 ppm and 1 ppm for soils from grade to refusal. No groundwater was encountered in the excavation or in the borings. Therefore, no groundwater well could be installed. 06/27/19 - Lakhani Spill Closure Report (Preferred Environmental Services, 06/18/19) - In January and February of 2019 two USTs were removed from 5901 Palisades Avenue, Bronx. A NYSDEC Spill was assigned to the Subject Property due to observed impacted soils during the tank removals. Based on the visually impacted soils a total of 36 cubic yards of soil was removed

**\\HEBREW HOME FOR THE AGED (Continued)** **S121988498**

from the Subject Property. Soils were removed to the furthest extent possible. Confirmatory soil borings were installed in May of 2019 in the area where impacted soil was left in place. The results of the additional soil borings did not indicate evidence of a Spill additionally bedrock was encountered prior to groundwater. 07/18/19 - Lakhani DEC Lakhani asked for a bedrock well to be installed and sampled. 08/06/19 - Lakhani - Spill being transferred to Sekhon. 08/20/19 - Lakhani Preferred is scheduled to install the monitoring well on August 13th. They will sample two weeks after and submit a letter report summarizing the results. 10/4/19 - Sekhon Report DECDOCS. SVOC (Chrysene) slightly above the limits ( 0.0620ug/L _ CP 51 limit is 0.002ug/L) 10/16 - Sekhon Case discussed with DEC Piper & closed.

Remarks: tank test failure. two UST systems failed tightness test.

All TTF:

| | |
|---|---|
| Facility ID: | 1809324 |
| Spill Number: | 1809324 |
| Spill Tank Test: | 2506384 |
| Site ID: | 580163 |
| Tank Number: | 004/5921 |
| Tank Size: | 275 |
| Material: | 0001 |
| EPA UST: | False |
| UST: | True |
| Cause: | 00 |
| Source: | 00 |
| Test Method: | - |
| Test Method 2: | Not reported |
| Leak Rate: | Not reported |
| Gross Fail: | Not reported |
| Modified By: | HRPATEL |
| Last Modified Date: | Not reported |

| | |
|---|---|
| Facility ID: | 1809324 |
| Spill Number: | 1809324 |
| Spill Tank Test: | 2506386 |
| Site ID: | 580163 |
| Tank Number: | 005/5931 |
| Tank Size: | 500 |
| Material: | 0001 |
| EPA UST: | False |
| UST: | True |
| Cause: | 00 |
| Source: | 00 |
| Test Method: | - |
| Test Method 2: | Not reported |
| Leak Rate: | Not reported |
| Gross Fail: | Not reported |
| Modified By: | HRPATEL |
| Last Modified Date: | Not reported |

All Materials:

| | |
|---|---|
| Site ID: | 580163 |
| Operable Unit ID: | 1327878 |
| Operable Unit: | 01 |
| Material ID: | 2336807 |

**\\HEBREW HOME FOR THE AGED (Continued)** **S121988498**

| | |
|---|---|
| Material Code: | 0001A |
| Material Name: | #2 fuel oil |
| Case No.: | Not reported |
| Material FA: | Petroleum |
| Quantity: | Not reported |
| Units: | Not reported |
| Recovered: | Not reported |
| Oxygenate: | Not reported |

NYC OER:

| | |
|---|---|
| Name: | 5901 PALISADE AVENUE |
| Address: | 5901 PALISADE AVENUE |
| City,State,Zip: | BRONX, NY |
| Latitude: | 40.908233 |
| Longitude: | -73.90897 |
| OER Project Numbers: | 25TMP0261X,25EAIR057X |
| BBL: | 2059330225 |
| OER Program: | E/RD (No Cleanup) |
| Class: | Active (A) |
| Phase: | Closure |

URL:

| | |
|---|---|
| Postcode: | 10471 |
| Community Board: | 8 |
| Council District: | 11 |
| Census Tract: | 309 |
| BIN: | 2116428 |
| NTA: | North Riverdale-Fieldston-Riverdale |

Count: 4 records. ORPHAN SUMMARY

| City | EDR ID | Site Name | Site Address | Zip | Database(s) |
|---|---|---|---|---|---|
| BRONX | S133345979 | MARITIME CADET TRAINING GROUNDS | HARLEM RIVER, EXTERIOR ST, UNI | | NY SWF/LF |
| BRONX | S133345891 | BARRETTO POINT PARK | MANIDA AVE, VEILE AVE, TIFFANY | | NY SWF/LF |
| BRONX | S105998652 | EAST RIVER | W/ OF THROGS NECK BRIDGE | | NY LTANKS |
| YONKERS | S125358683 | ROBINSON TTF | BRUCE AVE | | NY LTANKS |

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

**STANDARD ENVIRONMENTAL RECORDS**

***Lists of Federal NPL (Superfund) sites***

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 12/26/2025
Date Data Arrived at EDR: 01/05/2026
Date Made Active in Reports: 01/22/2026
Number of Days to Update: 17

Source: EPA
Telephone: N/A
Last EDR Contact: 03/02/2026
Next Scheduled EDR Contact: 07/06/2026
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 12/26/2025
Date Data Arrived at EDR: 01/05/2026
Date Made Active in Reports: 01/22/2026
Number of Days to Update: 17

Source: EPA
Telephone: N/A
Last EDR Contact: 03/02/2026
Next Scheduled EDR Contact: 07/06/2026
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

***Lists of Federal Delisted NPL sites***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 12/26/2025
Date Data Arrived at EDR: 01/05/2026
Date Made Active in Reports: 01/22/2026
Number of Days to Update: 17

Source: EPA
Telephone: N/A
Last EDR Contact: 03/02/2026
Next Scheduled EDR Contact: 07/06/2026
Data Release Frequency: Quarterly

***Lists of Federal sites subject to CERCLA removals and CERCLA orders***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 12/10/2025
Date Data Arrived at EDR: 12/10/2025
Date Made Active in Reports: 02/12/2026
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 03/24/2026
Next Scheduled EDR Contact: 07/06/2026
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 12/26/2025
Date Data Arrived at EDR: 01/05/2026
Date Made Active in Reports: 01/22/2026
Number of Days to Update: 17

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/02/2026
Next Scheduled EDR Contact: 04/20/2026
Data Release Frequency: Quarterly

***Lists of Federal CERCLA sites with NFRAP***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 12/26/2025
Date Data Arrived at EDR: 01/05/2026
Date Made Active in Reports: 01/22/2026
Number of Days to Update: 17

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/02/2026
Next Scheduled EDR Contact: 04/20/2026
Data Release Frequency: Quarterly

***Lists of Federal RCRA facilities undergoing Corrective Action***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 11/30/2025
Date Data Arrived at EDR: 12/03/2025
Date Made Active in Reports: 12/10/2025
Number of Days to Update: 7

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Quarterly

***Lists of Federal RCRA TSD facilities***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 11/30/2025
Date Data Arrived at EDR: 12/03/2025
Date Made Active in Reports: 12/10/2025
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Quarterly

***Lists of Federal RCRA generators***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/30/2025
Date Data Arrived at EDR: 12/03/2025
Date Made Active in Reports: 12/10/2025
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 11/30/2025
Date Data Arrived at EDR: 12/03/2025
Date Made Active in Reports: 12/10/2025
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 11/30/2025
Date Data Arrived at EDR: 12/03/2025
Date Made Active in Reports: 12/10/2025
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Quarterly

***Federal institutional controls / engineering controls registries***

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 03/11/2025
Date Data Arrived at EDR: 04/02/2025
Date Made Active in Reports: 06/24/2025
Number of Days to Update: 83

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 01/28/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 11/11/2025
Date Made Active in Reports: 11/12/2025
Number of Days to Update: 1

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/17/2026
Next Scheduled EDR Contact: 06/01/2026
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 11/11/2025
Date Made Active in Reports: 11/12/2025
Number of Days to Update: 1

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/17/2026
Next Scheduled EDR Contact: 06/01/2026
Data Release Frequency: Varies

***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/01/2025
Date Data Arrived at EDR: 12/08/2025
Date Made Active in Reports: 02/12/2026
Number of Days to Update: 66

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Quarterly

***Lists of state- and tribal hazardous waste facilities***

NY SHWS: Inactive Hazardous Waste Disposal Sites in New York State

Referred to as the State Superfund Program, the Inactive Hazardous Waste Disposal Site Remedial Program is the cleanup program for inactive hazardous waste sites and now includes hazardous substance sites

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 10/30/2025
Date Made Active in Reports: 01/16/2026
Number of Days to Update: 78

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 02/03/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Annually

NJ SHWS: Known Contaminated Sites in New Jersey

The Known Contaminated Sites in New Jersey includes sites under the purview of the Site Remediation Program which have contamination present at levels greater than the applicable cleanup criteria for soil and/or groundwater standards. The sites appearing in Known Contaminated Sites in New Jersey are classified as either active, where the site is assigned to a specific remedial program area, or pending, where the site is awaiting assignment to a specific remedial program area. Sites where no further action (NFA) designation has been given are not included in this report unless there are other areas of identified contamination which have not been remediated. This report includes sites being remediated under all of the various regulatory programs administered by the Site Remediation Program such as: Federal Superfund Program, Federal Resource Conservation and Recovery Act (RCRA), New Jersey's Industrial Site Recovery Act (ISRA), New Jersey's Underground Storage of Hazardous Substances Act, New Jersey's Spill Compensation and Control Act, New Jersey's Solid Waste Management Act, New Jersey's Water Pollution Control Act.

Date of Government Version: 11/19/2025
Date Data Arrived at EDR: 11/19/2025
Date Made Active in Reports: 02/02/2026
Number of Days to Update: 75

Source: New Jersey Department of Environmental Protection
Telephone: 609-292-8761
Last EDR Contact: 01/29/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Varies

***Lists of state and tribal landfills and solid waste disposal facilities***

NY SWF/LF: Facility Register

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/09/2025
Date Data Arrived at EDR: 01/06/2026
Date Made Active in Reports: 03/17/2026
Number of Days to Update: 70

Source: Department of Environmental Conservation
Telephone: 518-402-8678
Last EDR Contact: 03/18/2026
Next Scheduled EDR Contact: 07/06/2026
Data Release Frequency: Quarterly

NJ SWF/LF: Solid Waste Facility Directory

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/13/2025
Date Data Arrived at EDR: 10/21/2025
Date Made Active in Reports: 01/13/2026
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 609-984-6741
Last EDR Contact: 01/20/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Annually

***Lists of state and tribal leaking storage tanks***

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/12/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 69

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 11/21/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

NY LTANKS: Spills Information Database
Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 10/30/2025
Date Made Active in Reports: 01/20/2026
Number of Days to Update: 82
Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 02/03/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Varies

NY HIST LTANKS: Listing of Leaking Storage Tanks
A listing of leaking underground and aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills. In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY LTANKS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 07/08/2005
Date Made Active in Reports: 07/14/2005
Number of Days to Update: 6
Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 07/07/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

***Lists of state and tribal registered storage tanks***

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 06/06/2025
Date Data Arrived at EDR: 08/26/2025
Date Made Active in Reports: 11/12/2025
Number of Days to Update: 78
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 03/25/2026
Next Scheduled EDR Contact: 07/13/2026
Data Release Frequency: Varies

NY UST: Petroleum Bulk Storage (PBS) Database
Facilities that have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons.

Date of Government Version: 12/05/2025
Date Data Arrived at EDR: 12/05/2025
Date Made Active in Reports: 12/15/2025
Number of Days to Update: 10
Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: No Update Planned

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NJ UST: Underground Storage Tank Data

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 09/25/2025
Date Data Arrived at EDR: 11/10/2025
Date Made Active in Reports: 01/27/2026
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 609-341-3121
Last EDR Contact: 01/21/2026
Next Scheduled EDR Contact: 05/11/2026
Data Release Frequency: Varies

NY CBS UST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in underground tanks of any size

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 10/24/2005
Next Scheduled EDR Contact: 01/23/2006
Data Release Frequency: No Update Planned

NY MOSF UST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

NY MOSF: Major Oil Storage Facility Site Listing

These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 12/05/2025
Date Data Arrived at EDR: 12/05/2025
Date Made Active in Reports: 12/15/2025
Number of Days to Update: 10

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Quarterly

NY CBS: Chemical Bulk Storage Site Listing

These facilities store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size

Date of Government Version: 12/05/2025
Date Data Arrived at EDR: 12/05/2025
Date Made Active in Reports: 12/15/2025
Number of Days to Update: 10

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Quarterly

NY AST: Petroleum Bulk Storage

Registered Aboveground Storage Tanks.

Date of Government Version: 12/05/2025
Date Data Arrived at EDR: 12/05/2025
Date Made Active in Reports: 12/15/2025
Number of Days to Update: 10

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: No Update Planned

NY CBS AST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

NY MOSF AST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 11/21/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/19/2026
Number of Days to Update: 70

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 12/11/2025
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

NY TANKS: Storage Tank Faciliy Listing

This database contains records of facilities that are or have been regulated under Bulk Storage Program. Tank information for these facilities may not be releasable by the state agency.

Date of Government Version: 12/05/2025
Date Data Arrived at EDR: 12/05/2025
Date Made Active in Reports: 12/15/2025
Number of Days to Update: 10

Source: Department of Environmental Conservation
Telephone: 518-402-9543
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Quarterly

***State and tribal institutional control / engineering control registries***

NY RES DECL: Restrictive Declarations Listing

A restrictive declaration is a covenant running with the land which binds the present and future owners of the property. As a condition of certain special permits, the City Planning Commission may require an applicant to sign and record a restrictive declaration that places specified conditions on the future use and development of the property. Certain restrictive declarations are indicated by a D on zoning maps.

Date of Government Version: 11/22/2025
Date Data Arrived at EDR: 12/03/2025
Date Made Active in Reports: 02/23/2026
Number of Days to Update: 82

Source: NYC Department of City Planning
Telephone: 212-720-3401
Last EDR Contact: 03/10/2026
Next Scheduled EDR Contact: 06/22/2026
Data Release Frequency: Varies

NY ENV RES DECL: Environmental Restrictive Declarations

The Environmental Restrictive Declarations (ERD) listed were recorded in connection with a zoning action against the noted Tax Blocks and Tax Lots, or portion thereof, and are available in the property records on file at the Office of the City Register for Bronx, Kings, New York and Queens counties or at the Richmond County Clerk's office. They contain environmental requirements with respect to hazardous materials, air quality and/or noise in accordance with Section 11-15 of this Resolution.

Date of Government Version: 11/22/2025
Date Data Arrived at EDR: 12/08/2025
Date Made Active in Reports: 02/26/2026
Number of Days to Update: 80

Source: New York City Department of City Planning
Telephone: 212-720-3300
Last EDR Contact: 03/09/2026
Next Scheduled EDR Contact: 06/22/2026
Data Release Frequency: Varies

NY ENG CONTROLS: Registry of Engineering Controls

Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 10/30/2025
Date Made Active in Reports: 01/16/2026
Number of Days to Update: 78

Source: Department of Environmental Conservation
Telephone: 518-402-9553
Last EDR Contact: 02/03/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Quarterly

NJ ENG CONTROLS: Declaration Environmental Restriction/Deed Notice Sites

Legal Document that restricts the use of contaminated property; holds owner(s) to the regulatory/statutory requirements for cleanup.

Date of Government Version: 11/25/2025
Date Data Arrived at EDR: 12/08/2025
Date Made Active in Reports: 03/02/2026
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 609-341-3121
Last EDR Contact: 01/29/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Varies

NY INST CONTROL: Registry of Institutional Controls

Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 10/30/2025
Date Made Active in Reports: 01/16/2026
Number of Days to Update: 78

Source: Department of Environmental Conservation
Telephone: 518-402-9553
Last EDR Contact: 02/03/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Quarterly

NJ INST CONTROL: Classification Exception Area Sites

A Classification Exception Area is an institutional control providing notice that ground water contamination exists in a particular location above State standards.

Date of Government Version: 08/05/2025
Date Data Arrived at EDR: 08/06/2025
Date Made Active in Reports: 08/08/2025
Number of Days to Update: 2

Source: Department of Environmental Protection
Telephone: 609-341-3121
Last EDR Contact: 01/29/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Varies

***Lists of state and tribal voluntary cleanup sites***

NY VCP NYC: Voluntary Cleanup Program Listing NYC

New York City voluntary cleanup program sites.

Date of Government Version: 11/20/2025
Date Data Arrived at EDR: 11/21/2025
Date Made Active in Reports: 02/12/2026
Number of Days to Update: 83

Source: New York City Office of Environmental Protection
Telephone: 212-788-8841
Last EDR Contact: 03/03/2026
Next Scheduled EDR Contact: 06/15/2026
Data Release Frequency: Varies

NY VCP: Voluntary Cleanup Agreements

New York established its Voluntary Cleanup Program (VCP) to address the environmental, legal and financial barriers that often hinder the redevelopment and reuse of contaminated properties. The Voluntary Cleanup Program was developed to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfield" sites.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 10/30/2025
Date Made Active in Reports: 01/16/2026
Number of Days to Update: 78

Source: Department of Environmental Conservation
Telephone: 518-402-9711
Last EDR Contact: 02/03/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Semi-Annually

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/03/2025
Next Scheduled EDR Contact: 03/30/2026
Data Release Frequency: Varies

NJ VCP: Voluntary Cleanup Program Sites

Through the VCP, responsible parties, developers, local officials, or individuals may work with the department to remediate non-priority contaminated sites that pose no immediate threat to human health or the environment.

Date of Government Version: 01/12/2018
Date Data Arrived at EDR: 05/22/2018
Date Made Active in Reports: 07/02/2018
Number of Days to Update: 41

Source: Department of Environmental Protection
Telephone: 609-341-3121
Last EDR Contact: 03/18/2026
Next Scheduled EDR Contact: 07/06/2026
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

***Lists of state and tribal brownfield sites***

NY BROWNFIELDS: Brownfields Site List

A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 10/30/2025
Date Made Active in Reports: 01/16/2026
Number of Days to Update: 78

Source: Department of Environmental Conservation
Telephone: 518-402-9764
Last EDR Contact: 02/03/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Semi-Annually

NJ BROWNFIELDS: Brownfields Database

Brownfields are identified as former or current commercial or industrial use sites that are presently vacant or underutilized, on which there is suspected to have been a discharge of a contamination to the soil or groundwater at concentrations greater than applicable cleanup criteria.

Date of Government Version: 09/24/2025
Date Data Arrived at EDR: 10/14/2025
Date Made Active in Reports: 01/05/2026
Number of Days to Update: 83

Source: Department of Environmental Protection
Telephone: 609-292-1251
Last EDR Contact: 01/15/2026
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Annually

NY ERP: Environmental Restoration Program Listing

In an effort to spur the cleanup and redevelopment of brownfields, New Yorkers approved a $200 million Environmental Restoration or Brownfields Fund as part of the $1.75 billion Clean Water/Clean Air Bond Act of 1996 (1996 Bond Act). Enhancements to the program were enacted on October 7, 2003. Under the Environmental Restoration Program, the State provides grants to municipalities to reimburse up to 90 percent of on-site eligible costs and 100% of off-site eligible costs for site investigation and remediation activities. Once remediated, the property may then be reused for commercial, industrial, residential or public use.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 10/30/2025
Date Made Active in Reports: 01/20/2026
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 02/03/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Quarterly

**ADDITIONAL ENVIRONMENTAL RECORDS**

***Local Brownfield lists***

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/02/2025
Date Data Arrived at EDR: 12/03/2025
Date Made Active in Reports: 02/12/2026
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/10/2026
Next Scheduled EDR Contact: 06/22/2026
Data Release Frequency: Semi-Annually

***Local Lists of Landfill / Solid Waste Disposal Sites***

NY SWRCY: Registered Recycling Facility List

A listing of recycling facilities.

Date of Government Version: 12/09/2025
Date Data Arrived at EDR: 01/06/2026
Date Made Active in Reports: 03/17/2026
Number of Days to Update: 70

Source: Department of Environmental Conservation
Telephone: 518-402-8678
Last EDR Contact: 03/18/2026
Next Scheduled EDR Contact: 07/06/2026
Data Release Frequency: Quarterly

NY SWTIRE: Registered Waste Tire Storage & Facility List

A listing of facilities registered to accept waste tires.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/04/2025
Date Made Active in Reports: 09/02/2025
Number of Days to Update: 90

Source: Department of Environmental Conservation
Telephone: 518-402-8694
Last EDR Contact: 02/25/2026
Next Scheduled EDR Contact: 06/15/2026
Data Release Frequency: No Update Planned

NJ SWRCY: Approved Class B Recycling Facilities

"Class B recyclable material" means a source separated recyclable material which is subject to Department approval prior to receipt, storage, processing or transfer at a recycling center in accordance with N.J.S.A. 13:1E-99.34b.

Date of Government Version: 02/28/2025
Date Data Arrived at EDR: 04/22/2025
Date Made Active in Reports: 07/07/2025
Number of Days to Update: 76

Source: Department of Environmental Protection
Telephone: 609-984-6650
Last EDR Contact: 01/20/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52
Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/22/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137
Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/07/2026
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 02/07/2024
Date Data Arrived at EDR: 11/13/2024
Date Made Active in Reports: 11/19/2024
Number of Days to Update: 6
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Varies

***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 04/04/2025
Date Data Arrived at EDR: 06/02/2025
Date Made Active in Reports: 08/12/2025
Number of Days to Update: 71
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 11/20/2025
Next Scheduled EDR Contact: 03/02/2026
Data Release Frequency: No Update Planned

NY DEL SHWS: Delisted Registry Sites
A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 10/30/2025
Date Made Active in Reports: 01/16/2026
Number of Days to Update: 78
Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 02/03/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 04/04/2025
Date Data Arrived at EDR: 06/02/2025
Date Made Active in Reports: 08/12/2025
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/19/2026
Next Scheduled EDR Contact: 06/01/2026
Data Release Frequency: Quarterly

***Local Lists of Registered Storage Tanks***

NY HIST UST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. It is no longer updated due to the sensitive nature of the information involved. See UST for more current data.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 06/02/2006
Date Made Active in Reports: 07/20/2006
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 10/23/2006
Next Scheduled EDR Contact: 01/22/2007
Data Release Frequency: Varies

NY HIST AST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capabilities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. No longer updated due to the sensitive nature of the information involved. See AST for more current data.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 06/02/2006
Date Made Active in Reports: 07/20/2006
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 10/23/2006
Next Scheduled EDR Contact: 01/22/2007
Data Release Frequency: No Update Planned

***Local Land Records***

NY LIENS: Spill Liens Information

Lien information from the Oil Spill Fund.

Date of Government Version: 10/23/2025
Date Data Arrived at EDR: 10/24/2025
Date Made Active in Reports: 01/13/2026
Number of Days to Update: 81

Source: Office of the State Comptroller
Telephone: 518-474-9034
Last EDR Contact: 01/21/2026
Next Scheduled EDR Contact: 05/11/2026
Data Release Frequency: Quarterly

NJ LIENS: Environmental LIENS

A listing of properties with environmental liens. The listing includes sites from the Site Remediation & Waste Management Program Sites where the Department has placed either a 1st Priority or Regular Spill Fund Lien against. 1st Priority Type Lien - a lien placed against the property where the discharged occurred providing that the owners of the property have some responsibility towards the discharge. First Priority Lien is superior to other types of liens. Non-Priority (Regular) Type Lien - a lien placed against the Responsible Party & their revenues and all real and personal property, other than the real property comprising the location of the discharge.

Date of Government Version: 02/16/2026
Date Data Arrived at EDR: 02/18/2026
Date Made Active in Reports: 03/03/2026
Number of Days to Update: 13

Source: Department of Environmental Protection
Telephone: 609-341-3121
Last EDR Contact: 01/29/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 12/26/2025
Date Data Arrived at EDR: 01/05/2026
Date Made Active in Reports: 01/22/2026
Number of Days to Update: 17

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 03/02/2026
Next Scheduled EDR Contact: 07/06/2026
Data Release Frequency: Semi-Annually

***Records of Emergency Release Reports***

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/07/2025
Date Data Arrived at EDR: 12/08/2025
Date Made Active in Reports: 02/12/2026
Number of Days to Update: 66

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Quarterly

NY SPILLS: Spills Information Database

Data collected on spills reported to NYSDEC as required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 10/30/2025
Date Made Active in Reports: 01/20/2026
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 02/03/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Varies

NY HIST SPILLS: SPILLS Database

This database contains records of chemical and petroleum spill incidents. Under State law, petroleum and hazardous chemical spills that can impact the waters of the state must be reported by the spiller (and, in some cases, by anyone who has knowledge of the spills). In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY SPILLS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 07/08/2005
Date Made Active in Reports: 07/14/2005
Number of Days to Update: 6

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 07/07/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NY SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/14/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/12/2013
Number of Days to Update: 40

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NJ SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/15/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/11/2013
Number of Days to Update: 39
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NY SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 11/02/2010
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/07/2013
Number of Days to Update: 63
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NJ SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 09/02/1997
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

***Other Ascertainable Records***

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 11/30/2025
Date Data Arrived at EDR: 12/03/2025
Date Made Active in Reports: 12/10/2025
Number of Days to Update: 7
Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 10/22/2025
Date Data Arrived at EDR: 11/06/2025
Date Made Active in Reports: 01/12/2026
Number of Days to Update: 67
Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/10/2026
Next Scheduled EDR Contact: 05/25/2026
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239
Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/08/2026
Next Scheduled EDR Contact: 04/20/2026
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 03/31/2026
Next Scheduled EDR Contact: 07/13/2026
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 01/29/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/07/2025
Date Data Arrived at EDR: 12/08/2025
Date Made Active in Reports: 02/05/2026
Number of Days to Update: 59

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA Watch List

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 01/28/2026
Next Scheduled EDR Contact: 05/11/2026
Data Release Frequency: No Update Planned

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 01/28/2026
Next Scheduled EDR Contact: 05/11/2026
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 06/14/2022
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 283

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/12/2026
Next Scheduled EDR Contact: 06/22/2026
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2024
Date Data Arrived at EDR: 11/10/2025
Date Made Active in Reports: 01/29/2026
Number of Days to Update: 80

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/12/2026
Next Scheduled EDR Contact: 05/25/2026
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/12/2026
Date Data Arrived at EDR: 01/13/2026
Date Made Active in Reports: 03/05/2026
Number of Days to Update: 51

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/13/2026
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/30/2026
Date Data Arrived at EDR: 02/02/2026
Date Made Active in Reports: 02/12/2026
Number of Days to Update: 10

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 03/02/2026
Next Scheduled EDR Contact: 06/08/2026
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 01/01/2026
Date Data Arrived at EDR: 01/14/2026
Date Made Active in Reports: 01/22/2026
Number of Days to Update: 8

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/08/2026
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 06/26/2025
Date Data Arrived at EDR: 07/01/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 28

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 03/02/2026
Next Scheduled EDR Contact: 05/11/2026
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 08/12/2025
Date Data Arrived at EDR: 09/30/2025
Date Made Active in Reports: 11/24/2025
Number of Days to Update: 55

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 12/23/2025
Next Scheduled EDR Contact: 04/13/2026
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 09/23/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Quarterly

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 01/26/2026
Date Data Arrived at EDR: 01/27/2026
Date Made Active in Reports: 02/25/2026
Number of Days to Update: 29
Source: Nuclear Regulatory Commission
Telephone: 301-415-0717
Last EDR Contact: 01/08/2026
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2024
Date Data Arrived at EDR: 11/19/2025
Date Made Active in Reports: 01/29/2026
Number of Days to Update: 71
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 02/20/2026
Next Scheduled EDR Contact: 06/08/2026
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/20/2026
Next Scheduled EDR Contact: 06/08/2026
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/29/2026
Next Scheduled EDR Contact: 05/11/2026
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/18/2026
Next Scheduled EDR Contact: 07/06/2026
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 12/31/2025
Date Data Arrived at EDR: 01/20/2026
Date Made Active in Reports: 03/05/2026
Number of Days to Update: 44
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/20/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2025
Date Data Arrived at EDR: 12/12/2025
Date Made Active in Reports: 02/25/2026
Number of Days to Update: 75
Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/25/2026
Next Scheduled EDR Contact: 07/13/2026
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2023
Date Data Arrived at EDR: 02/19/2025
Date Made Active in Reports: 03/07/2025
Number of Days to Update: 16
Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 03/31/2026
Next Scheduled EDR Contact: 07/13/2026
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/03/2023
Date Data Arrived at EDR: 03/03/2023
Date Made Active in Reports: 06/09/2023
Number of Days to Update: 98

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/21/2026
Next Scheduled EDR Contact: 05/11/2026
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 05/15/2025
Date Data Arrived at EDR: 05/15/2025
Date Made Active in Reports: 07/29/2025
Number of Days to Update: 75

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/12/2026
Next Scheduled EDR Contact: 05/25/2026
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 12/26/2025
Date Data Arrived at EDR: 01/05/2026
Date Made Active in Reports: 01/22/2026
Number of Days to Update: 17

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 03/02/2026
Next Scheduled EDR Contact: 07/06/2026
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/08/2025
Date Data Arrived at EDR: 08/18/2025
Date Made Active in Reports: 11/12/2025
Number of Days to Update: 86

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/13/2026
Next Scheduled EDR Contact: 06/01/2026
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data
Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 01/01/2026
Date Data Arrived at EDR: 01/06/2026
Date Made Active in Reports: 01/07/2026
Number of Days to Update: 1

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 01/06/2026
Next Scheduled EDR Contact: 06/01/2026
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 04/08/2025
Date Data Arrived at EDR: 05/20/2025
Date Made Active in Reports: 08/12/2025
Number of Days to Update: 84

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/03/2026
Next Scheduled EDR Contact: 06/01/2026
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing
Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/19/2026
Next Scheduled EDR Contact: 06/01/2026
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 06/04/2024
Date Data Arrived at EDR: 11/22/2024
Date Made Active in Reports: 02/18/2025
Number of Days to Update: 88

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 03/03/2026
Next Scheduled EDR Contact: 06/01/2026
Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/04/2025
Date Data Arrived at EDR: 12/05/2025
Date Made Active in Reports: 02/12/2026
Number of Days to Update: 69

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/11/2026
Next Scheduled EDR Contact: 06/15/2026
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/07/2025
Date Data Arrived at EDR: 11/19/2025
Date Made Active in Reports: 02/05/2026
Number of Days to Update: 78

Source: EPA
Telephone: (212) 637-3000
Last EDR Contact: 02/20/2026
Next Scheduled EDR Contact: 06/08/2026
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 07/31/2025
Date Data Arrived at EDR: 08/14/2025
Date Made Active in Reports: 11/04/2025
Number of Days to Update: 82

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 01/05/2026
Next Scheduled EDR Contact: 04/20/2026
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 12/13/2025
Date Data Arrived at EDR: 12/17/2025
Date Made Active in Reports: 02/25/2026
Number of Days to Update: 70

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/31/2026
Next Scheduled EDR Contact: 07/13/2026
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/11/2026
Next Scheduled EDR Contact: 06/01/2026
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/06/2025
Date Data Arrived at EDR: 11/06/2025
Date Made Active in Reports: 01/12/2026
Number of Days to Update: 67

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/10/2026
Next Scheduled EDR Contact: 05/25/2026
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 12/17/2025
Date Data Arrived at EDR: 12/18/2025
Date Made Active in Reports: 12/23/2025
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 12/18/2025
Next Scheduled EDR Contact: 04/13/2026
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 12/17/2025
Date Data Arrived at EDR: 12/18/2025
Date Made Active in Reports: 12/23/2025
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/18/2025
Next Scheduled EDR Contact: 04/13/2026
Data Release Frequency: Varies

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 12/17/2025
Date Data Arrived at EDR: 12/18/2025
Date Made Active in Reports: 12/23/2025
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: 202-566-0250
Last EDR Contact: 12/18/2025
Next Scheduled EDR Contact: 04/13/2026
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 12/17/2025
Date Data Arrived at EDR: 12/18/2025
Date Made Active in Reports: 12/23/2025
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/18/2025
Next Scheduled EDR Contact: 04/13/2026
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 12/17/2025
Date Data Arrived at EDR: 12/18/2025
Date Made Active in Reports: 12/23/2025
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/18/2025
Next Scheduled EDR Contact: 04/13/2026
Data Release Frequency: Varies

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 11/12/2024
Date Data Arrived at EDR: 07/21/2025
Date Made Active in Reports: 10/13/2025
Number of Days to Update: 84

Source: Department of Health & Human Services
Telephone: 202-741-5770
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 12/17/2025
Date Data Arrived at EDR: 12/18/2025
Date Made Active in Reports: 01/07/2026
Number of Days to Update: 20

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/18/2025
Next Scheduled EDR Contact: 04/13/2026
Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits. Caveats and Limitations: Less than half of states have required PFAS monitoring for at least one of their permittees and fewer states have established PFAS effluent limits for permittees. New rulemakings have been initiated that may increase the number of facilities monitoring for PFAS in the future.

Date of Government Version: 12/17/2025
Date Data Arrived at EDR: 12/19/2025
Date Made Active in Reports: 12/23/2025
Number of Days to Update: 4

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/19/2025
Next Scheduled EDR Contact: 04/13/2026
Data Release Frequency: Varies

PFAS PROJECT: NORTHEASTERN UNIVERSITY PFAS PROJECT

The PFAS Contamination Site Tracker records qualitative and quantitative data from each site in a chart, specifically examining discovery, contamination levels, government response, litigation, health impacts, media coverage, and community characteristics. All data presented in the chart were extracted from government websites, such as state health departments or the Environmental Protection Agency, and news articles.

Date of Government Version: 08/21/2025
Date Data Arrived at EDR: 12/04/2025
Date Made Active in Reports: 02/12/2026
Number of Days to Update: 70

Source: Social Science Environmental Health Research Institute
Telephone: N/A
Last EDR Contact: 03/05/2026
Next Scheduled EDR Contact: 06/15/2026
Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 12/17/2025
Date Data Arrived at EDR: 12/18/2025
Date Made Active in Reports: 12/23/2025
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/18/2025
Next Scheduled EDR Contact: 04/13/2026
Data Release Frequency: Varies

PFAS ECHO FIRE TRAIN: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facilitys name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 12/17/2025
Date Data Arrived at EDR: 12/18/2025
Date Made Active in Reports: 12/23/2025
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/18/2025
Next Scheduled EDR Contact: 04/13/2026
Data Release Frequency: Varies

PFAS PT 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration?s document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 12/17/2025
Date Data Arrived at EDR: 12/18/2025
Date Made Active in Reports: 12/23/2025
Number of Days to Update: 5

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 12/18/2025
Next Scheduled EDR Contact: 04/13/2026
Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 12/17/2025
Date Data Arrived at EDR: 12/18/2025
Date Made Active in Reports: 03/05/2026
Number of Days to Update: 77

Source: Environmental Protection Agency
Telephone: 202-267-2675
Last EDR Contact: 12/18/2025
Next Scheduled EDR Contact: 04/13/2026
Data Release Frequency: Varies

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 09/24/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 12/16/2016
Date Data Arrived at EDR: 01/06/2017
Date Made Active in Reports: 03/10/2017
Number of Days to Update: 63

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 09/24/2025
Next Scheduled EDR Contact: 01/12/2026
Data Release Frequency: No Update Planned

BIOSOLIDS: ICIS-NPDES Biosolids Facility Data

The data reflects compliance information about facilities in the biosolids program.

Date of Government Version: 01/10/2026
Date Data Arrived at EDR: 01/15/2026
Date Made Active in Reports: 03/05/2026
Number of Days to Update: 49

Source: Environmental Protection Agency
Telephone: 202-564-4700
Last EDR Contact: 01/15/2026
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Varies

UST FINDER RELEASE: UST Finder Releases Database

US EPA's UST Finder data is a national composite of leaking underground storage tanks. This data contains information about, and locations of, leaking underground storage tanks. Data was collected from state sources and standardized into a national profile by EPA's Office of Underground Storage Tanks, Office of Research and Development, and the Association of State and Territorial Solid Waste Management Officials.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/31/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 79

Source: Environmental Protecton Agency
Telephone: 202-564-0394
Last EDR Contact: 03/05/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Semi-Annually

UST FINDER: UST Finder Database

EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states and from Tribal lands and US territories . UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires.

Date of Government Version: 06/08/2023
Date Data Arrived at EDR: 10/04/2023
Date Made Active in Reports: 01/18/2024
Number of Days to Update: 106

Source: Environmental Protection Agency
Telephone: 202-564-0394
Last EDR Contact: 02/05/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Varies

E MANIFEST: Hazardous Waste Electronic Manifest System

EPA established a national system for tracking hazardous waste shipments electronically. This system, known as ?e-Manifest,? will modernize the nation?s cradle-to-grave hazardous waste tracking process while saving valuable time, resources, and dollars for industry and states.

Date of Government Version: 11/30/2025
Date Data Arrived at EDR: 12/05/2025
Date Made Active in Reports: 12/19/2025
Number of Days to Update: 14

Source: Environmental Protection Agency
Telephone: 833-501-6826
Last EDR Contact: 03/17/2026
Next Scheduled EDR Contact: 06/29/2026
Data Release Frequency: Varies

NY PFAS: PFAS Contamination Site Location Listing

DEC surveyed select businesses, fire departments, fire training centers, bulk storage facilities, airports, and Department of Defense (DoD) facilities. The responses to the survey have helped to determine if these entities used or stored materials containing PFOA/PFOS including AFFF and dispersants used in Teflon coating operations. The results of this survey will be updated periodically as additional responses are received..

Date of Government Version: 01/16/2019
Date Data Arrived at EDR: 05/08/2019
Date Made Active in Reports: 06/24/2019
Number of Days to Update: 47

Source: Department of Environmental Conservation
Telephone: 518-402-9020
Last EDR Contact: 01/28/2026
Next Scheduled EDR Contact: 05/11/2026
Data Release Frequency: Varies

NY PFAS 2: New York State Inactive Landfill Initiative

A list of landfills that were investigated and the analytical results for PFOA and PFOS for those landfills. These data represent the landfills from the ILI database that were investigated.

Date of Government Version: 09/02/2024
Date Data Arrived at EDR: 01/22/2026
Date Made Active in Reports: 03/30/2026
Number of Days to Update: 67

Source: Department of Environmental Conservation
Telephone: 518-402-9662
Last EDR Contact: 01/07/2026
Next Scheduled EDR Contact: 05/11/2026
Data Release Frequency: Varies

NY PFAS 3: PFAS Environmental Site Remediation List

A list of records included in the Environmental Remediation database whose material is listed as Perfluorooctanoic Acid or Perfluorooctane Sulfonic Acid.

Date of Government Version: 10/30/2025
Date Data Arrived at EDR: 10/30/2025
Date Made Active in Reports: 01/20/2026
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-9759
Last EDR Contact: 02/03/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Varies

NJ PFAS: PFAS Contamination Site Location

A listing of occurrences of Perfluorinated Chemicals in Untreated New Jersey Drinking Water Sources.

Date of Government Version: 08/06/2025
Date Data Arrived at EDR: 11/20/2025
Date Made Active in Reports: 12/04/2025
Number of Days to Update: 14

Source: Department of Environmental Protectionh
Telephone: 609-292-5550
Last EDR Contact: 02/04/2026
Next Scheduled EDR Contact: 05/25/2026
Data Release Frequency: Varies

NJ AQUEOUS FOAM: AQUAFFF Incidents Site Location Listing

A listing of AFFF incidents reported to the NJ DEPs Environmental Action Line.

Date of Government Version: 09/29/2025
Date Data Arrived at EDR: 10/03/2025
Date Made Active in Reports: 12/29/2025
Number of Days to Update: 87

Source: Department of Environmental Protection
Telephone: 609-292-5550
Last EDR Contact: 01/08/2026
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Semi-Annually

NY AIRS: Air Emissions Data

Point source emissions inventory data.

Date of Government Version: 01/08/2026
Date Data Arrived at EDR: 02/05/2026
Date Made Active in Reports: 02/10/2026
Number of Days to Update: 5

Source: Department of Environmental Conservation
Telephone: 518-402-8452
Last EDR Contact: 01/08/2026
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: Annually

NJ AIRS: Emissions Inventory Listing

An emission inventory is an estimate of air pollutant emissions in a given area. Emission inventories are fundamental building blocks used to develop air quality control strategies on a local, regional and national level. Emission inventories are also used to estimate the progress of an air quality program.

Date of Government Version: 10/17/2025
Date Data Arrived at EDR: 10/21/2025
Date Made Active in Reports: 01/13/2026
Number of Days to Update: 84

Source: Department of Environmental Protection
Telephone: 609-984-5483
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Varies

NY COAL ASH: Coal Ash Disposal Site Listing
A listing of coal ash disposal site locations.

Date of Government Version: 12/10/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 02/27/2026
Number of Days to Update: 78

Source: Department of Environmental Conservation
Telephone: 518-402-8660
Last EDR Contact: 03/18/2026
Next Scheduled EDR Contact: 07/06/2026
Data Release Frequency: Quarterly

NJ COAL ASH: Coal Ash Listing
Coal combustion survey ash listing.

Date of Government Version: 05/10/2010
Date Data Arrived at EDR: 05/12/2010
Date Made Active in Reports: 06/28/2010
Number of Days to Update: 47

Source: Department of Environmental Protection
Telephone: 609-984-6985
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2025
Data Release Frequency: Varies

NY DRYCLEANERS: Registered Drycleaners
A listing of all registered drycleaning facilities.

Date of Government Version: 11/25/2025
Date Data Arrived at EDR: 12/03/2025
Date Made Active in Reports: 12/05/2025
Number of Days to Update: 2

Source: Department of Environmental Conservation
Telephone: 518-402-8403
Last EDR Contact: 02/25/2026
Next Scheduled EDR Contact: 06/15/2026
Data Release Frequency: Annually

NJ DRYCLEANERS: Drycleaner List
A listing of registered drycleaners.

Date of Government Version: 10/24/2025
Date Data Arrived at EDR: 10/28/2025
Date Made Active in Reports: 01/14/2026
Number of Days to Update: 78

Source: Department of Environmental Protection
Telephone: 609-292-2795
Last EDR Contact: 01/21/2026
Next Scheduled EDR Contact: 05/11/2026
Data Release Frequency: Varies

NY E DESIGNATION: E DESIGNATION SITE LISTING
The (E (Environmental)) designation would ensure that sampling and remediation take place on the subject properties, and would avoid any significant impacts related to hazardous materials at these locations. The (E) designations would require that the fee owner of the sites conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the NYCDEP before the issuance of a building permit by the Department of Buildings pursuant to the provisions of Section 11-15 of the Zoning Resolution (Environmental Requirements). The (E) designations also include a mandatory construction-related health and safety plan which must be approved by NYCDEP.

Date of Government Version: 11/26/2025
Date Data Arrived at EDR: 12/03/2025
Date Made Active in Reports: 01/28/2026
Number of Days to Update: 56

Source: New York City Department of City Planning
Telephone: 718-595-6658
Last EDR Contact: 03/12/2026
Next Scheduled EDR Contact: 06/22/2026
Data Release Frequency: Semi-Annually

NJ FIN ASSURANCE: Financial Assurance Information Listing
Financial Assurance information.

Date of Government Version: 10/07/2025
Date Data Arrived at EDR: 11/20/2025
Date Made Active in Reports: 02/02/2026
Number of Days to Update: 74

Source: Department of Environmental Protection
Telephone: 609-341-3121
Last EDR Contact: 02/04/2026
Next Scheduled EDR Contact: 05/25/2026
Data Release Frequency: Semi-Annually

NY FIN ASSURANCE 1: Financial Assurance Information Listing
Financial assurance information.

Date of Government Version: 12/10/2025
Date Data Arrived at EDR: 12/11/2025
Date Made Active in Reports: 12/24/2025
Number of Days to Update: 13

Source: Department of Environmental Conservation
Telephone: 518-402-8660
Last EDR Contact: 03/18/2026
Next Scheduled EDR Contact: 07/06/2026
Data Release Frequency: Quarterly

NY FIN ASSURANCE 2: Financial Assurance Information Listing
A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 06/02/2025
Date Data Arrived at EDR: 06/03/2025
Date Made Active in Reports: 08/25/2025
Number of Days to Update: 83

Source: Department of Environmental Conservation
Telephone: 518-402-8712
Last EDR Contact: 02/25/2026
Next Scheduled EDR Contact: 06/15/2026
Data Release Frequency: Varies

NY HSWDS: Hazardous Substance Waste Disposal Site Inventory
The list includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that U.S. EPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites now that the New York State Superfund has been refinanced and changed. This means that the study inventory has served its purpose and will no longer be maintained as a separate entity. The last version of the study inventory is frozen in time. The sites on the study will not automatically be made Superfund sites, rather each site will be further evaluated for listing on the Registry. So overtime they will be added to the registry or not.

Date of Government Version: 01/01/2003
Date Data Arrived at EDR: 10/20/2006
Date Made Active in Reports: 11/30/2006
Number of Days to Update: 41

Source: Department of Environmental Conservation
Telephone: 518-402-9564
Last EDR Contact: 05/26/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: No Update Planned

NYC LEAD: Lead-based Paint Testing Results
The results of the inspections for all classrooms serving students under six in applicable buildings. Identifies all classrooms, whether there was observation of peeling paint, and if there was, standard response protocol was followed.

Date of Government Version: 09/29/2025
Date Data Arrived at EDR: 10/28/2025
Date Made Active in Reports: 01/16/2026
Number of Days to Update: 80

Source: New York City Department of Education
Telephone: 212-374-5141
Last EDR Contact: 01/28/2026
Next Scheduled EDR Contact: 05/11/2026
Data Release Frequency: Varies

NYC LEAD 2: Recent Lead Paint Violations
Pursuant to New York City?s Housing Maintenance Code, the Department of Housing Preservation and Development (HPD) issues violations against conditions in rental dwelling units that have been verified to violate the New York City Housing Maintenance Code (HMC) or the New York State Multiple Dwelling Law (MDL). Violations are issued when an inspection verifies that a violation of the HMC or MDL exists. It is closed when the violation is corrected, as observed/verified by HPD or as certified by the landlord.

Date of Government Version: 10/27/2025
Date Data Arrived at EDR: 10/28/2025
Date Made Active in Reports: 01/16/2026
Number of Days to Update: 80

Source: New York City Department of Housing Preservation & Development
Telephone: 212-863-8200
Last EDR Contact: 01/28/2026
Next Scheduled EDR Contact: 06/11/2026
Data Release Frequency: Varies

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 11/30/2023
Date Made Active in Reports: 12/01/2023
Number of Days to Update: 1

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/22/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 03/25/2026
Next Scheduled EDR Contact: 07/13/2026
Data Release Frequency: Annually

NY SPDES: State Pollutant Discharge Elimination System

New York State has a state program which has been approved by the United States Environmental Protection Agency for the control of wastewater and stormwater discharges in accordance with the Clean Water Act. Under New York State law the program is known as the State Pollutant Discharge Elimination System (SPDES) and is broader in scope than that required by the Clean Water Act in that it controls point source discharges to groundwaters as well as surface waters.

Date of Government Version: 09/24/2025
Date Data Arrived at EDR: 10/21/2025
Date Made Active in Reports: 01/09/2026
Number of Days to Update: 80

Source: Department of Environmental Conservation
Telephone: 518-402-8233
Last EDR Contact: 01/08/2026
Next Scheduled EDR Contact: 04/27/2026
Data Release Frequency: No Update Planned

NJPDES: New Jersey Pollutant Discharge Elimination System Dischargers

The NJPDES contains the names, addresses and other information of all permitted New Jersey Pollutant Discharge Elimination Sytem dischargers.

Date of Government Version: 11/01/2025
Date Data Arrived at EDR: 11/13/2025
Date Made Active in Reports: 02/02/2026
Number of Days to Update: 81

Source: Department of Environmental Protection
Telephone: 609-984-4428
Last EDR Contact: 02/17/2026
Next Scheduled EDR Contact: 06/01/2026
Data Release Frequency: Varies

NY VAPOR REOPENED: Vapor Intrusion Legacy Site List

New York is currently re-evaluating previous assumptions and decisions regarding the potential for soil vapor intrusion exposures at sites. As a result, all past, current, and future contaminated sites will be evaluated to determine whether these sites have the potential for exposures related to soil vapor intrusion.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 02/08/2022
Date Made Active in Reports: 05/06/2022
Number of Days to Update: 87

Source: Department of Environmenal Conservation
Telephone: 518-402-9814
Last EDR Contact: 02/05/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: Varies

NY UIC: Underground Injection Control Wells

A listing of enhanced oil recovery underground injection wells.

Date of Government Version: 11/19/2025
Date Data Arrived at EDR: 11/20/2025
Date Made Active in Reports: 02/11/2026
Number of Days to Update: 83

Source: Department of Environmental Conservation
Telephone: 518-402-8056
Last EDR Contact: 02/24/2026
Next Scheduled EDR Contact: 06/08/2026
Data Release Frequency: Quarterly

NJ UIC: Underground Injection Wells Database

A listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

Date of Government Version: 01/09/2009
Date Data Arrived at EDR: 02/25/2009
Date Made Active in Reports: 03/11/2009
Number of Days to Update: 14

Source: Department of Environmental Protection
Telephone: 609-292-0407
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Varies

NY COOLING TOWERS: Registered Cooling Towers

This data includes the location of cooling towers registered with New York State. The data is self-reported by owners/property managers of cooling towers in service in New York State. In August 2015, the New York State Department of Health released emergency regulations requiring the owners of cooling towers to register them with New York State.

Date of Government Version: 12/30/2025
Date Data Arrived at EDR: 01/06/2026
Date Made Active in Reports: 03/17/2026
Number of Days to Update: 70

Source: Department of Health
Telephone: 518-402-7650
Last EDR Contact: 01/06/2026
Next Scheduled EDR Contact: 04/20/2026
Data Release Frequency: Varies

NYC OER: OER Cleanup Sites Listing

Properties remediated under OER's oversight, both in the E-Designation program and the NYC Voluntary Cleanup Program. Includes sites completed and in progress.

Date of Government Version: 11/20/2025
Date Data Arrived at EDR: 11/21/2025
Date Made Active in Reports: 02/12/2026
Number of Days to Update: 83

Source: Office of Environmental Remediation
Telephone: 212-788-8841
Last EDR Contact: 03/03/2026
Next Scheduled EDR Contact: 06/15/2026
Data Release Frequency: Varies

NYC LAND USE: New York City Land Use Information

Land use colors

Date of Government Version: 09/30/2025
Date Data Arrived at EDR: 12/03/2025
Date Made Active in Reports: 02/24/2026
Number of Days to Update: 83

Source: New York City Department of City Planning
Telephone: 212-720-3300
Last EDR Contact: 03/10/2026
Next Scheduled EDR Contact: 06/22/2026
Data Release Frequency: Varies

NY ILI: New York State Inactive Landfill Initiative

A solid waste site priority list of mitigation and remedial activities to address sites causing, or substantially contributing to, impairments of drinking water quality. Inactive solid waste disposal sites, primarily landfills, and their potential impact on New York?s drinking water resources from site-related contaminants, with a focus on emerging contaminants.

Date of Government Version: 07/01/2025
Date Data Arrived at EDR: 07/29/2025
Date Made Active in Reports: 08/13/2025
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-8671
Last EDR Contact: 01/21/2026
Next Scheduled EDR Contact: 05/11/2026
Data Release Frequency: Varies

NY MGP: Manufactured Gas Plants Listing

From the late 1800's to the mid 1900's, hundreds of manufactured gas plants across New York State supplied homes and industry with fuel for heating, cooking, and lighting. Today, the New York State DEC is overseeing the investigation and cleanup of contamination left behind from these plants.

Date of Government Version: 11/25/2025
Date Data Arrived at EDR: 11/26/2025
Date Made Active in Reports: 02/12/2026
Number of Days to Update: 78

Source: Department of Environmental Conservation
Telephone: 518-402-9662
Last EDR Contact: 03/02/2026
Next Scheduled EDR Contact: 06/15/2026
Data Release Frequency: Varies

DRYCLEANERS: Drycleaner Facility Listing
A listing of list of ALL Dry cleaner facilities from the Integrated Compliance Information System (ICIS).

Date of Government Version: 12/13/2025
Date Data Arrived at EDR: 12/17/2025
Date Made Active in Reports: 03/12/2026
Number of Days to Update: 85
Source: Environmental Protection Agency
Telephone: 202-254-2501
Last EDR Contact: 03/31/2026
Next Scheduled EDR Contact: 07/13/2026
Data Release Frequency: Varies

ABAND AIRFIELDS: Abandoned & Little-Known Airfields Listing
Abandoned and little known airfield locations, in the United States.

Date of Government Version: 03/04/2026
Date Data Arrived at EDR: 03/05/2026
Date Made Active in Reports: 03/12/2026
Number of Days to Update: 7
Source: Airfields-Freeman
Telephone: N/A
Last EDR Contact: 03/05/2026
Next Scheduled EDR Contact: 06/15/2026
Data Release Frequency: Varies

**EDR HIGH RISK HISTORICAL RECORDS**

***EDR Exclusive Records***

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A
Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

**EDR RECOVERED GOVERNMENT ARCHIVES**

***Exclusive Recovered Govt. Archives***

NY RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Environmental Conservation
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

NJ RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the New Jersey Department of Environmental Protection in New Jersey.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Source: New Jersey Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

NY RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Environmental Conservation
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

NJ RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the New Jersey Department of Environmental Protection in New Jersey.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: New Jersey Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

**COUNTY RECORDS**

CORTLAND COUNTY:

NY AST - CORTLAND: Cortland County Storage Tank Listing

A listing of aboveground storage tank sites located in Cortland County.

Date of Government Version: 08/20/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 57

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Quarterly

NY UST - CORTLAND: Cortland County Storage Tank Listing
A listing of underground storage tank sites located in Cortland County.

Date of Government Version: 08/20/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 57

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Quarterly

NASSAU COUNTY:

NY AST - NASSAU: Registered Tank Database
A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 11/27/2023
Date Data Arrived at EDR: 11/28/2023
Date Made Active in Reports: 02/06/2024
Number of Days to Update: 70

Source: Nassau County Health Department
Telephone: 516-571-3314
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: No Update Planned

NY AST NCFM: Storage Tank Database
A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011
Date Data Arrived at EDR: 02/23/2011
Date Made Active in Reports: 03/29/2011
Number of Days to Update: 34

Source: Nassau County Office of the Fire Marshal
Telephone: 516-572-1000
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Varies

NY TANKS NASSAU: Registered Tank Database in Nassau County
A listing of facilities in Nassau County with storage tanks.

Date of Government Version: 11/27/2023
Date Data Arrived at EDR: 11/28/2023
Date Made Active in Reports: 02/06/2024
Number of Days to Update: 70

Source: Nassau County Department of Health
Telephone: 516-227-9691
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: No Update Planned

NY UST - NASSAU: Registered Tank Database
A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 11/27/2023
Date Data Arrived at EDR: 11/28/2023
Date Made Active in Reports: 02/06/2024
Number of Days to Update: 70

Source: Nassau County Health Department
Telephone: 516-571-3314
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: No Update Planned

NY UST NCFM: Storage Tank Database
A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011
Date Data Arrived at EDR: 02/23/2011
Date Made Active in Reports: 03/29/2011
Number of Days to Update: 34

Source: Nassau County Office of the Fire Marshal
Telephone: 516-572-1000
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Varies

ROCKLAND COUNTY:

NY AST - ROCKLAND: Petroleum Bulk Storage Database

A listing of aboveground storage tank sites located in Rockland County. Rockland County?s Petroleum Bulk Storage (PBS) program is no longer in service. All related operations/duties are now wholly overseen by the New York State Dept. of Environmental Conservation (NYSDEC).

Date of Government Version: 02/02/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 09/22/2017
Number of Days to Update: 189

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 02/18/2026
Next Scheduled EDR Contact: 06/08/2026
Data Release Frequency: No Update Planned

NY UST - ROCKLAND: Petroleum Bulk Storage Database

A listing of underground storage tank sites located in Rockland County. Rockland County?s Petroleum Bulk Storage (PBS) program is no longer in service. All related operations/duties are now wholly overseen by the New York State Dept. of Environmental Conservation (NYSDEC).

Date of Government Version: 02/02/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 09/22/2017
Number of Days to Update: 189

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 02/18/2026
Next Scheduled EDR Contact: 06/08/2026
Data Release Frequency: No Update Planned

SUFFOLK COUNTY:

NY AST - SUFFOLK: Storage Tank Database

A listing of aboveground storage tank sites located in Suffolk County.

Date of Government Version: 06/28/2018
Date Data Arrived at EDR: 12/06/2018
Date Made Active in Reports: 02/07/2019
Number of Days to Update: 63

Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: No Update Planned

NY TANKS SUFFOLK: Storage Tank Database

This county is not included in the state?s database. These are facilities that have no tank information in the storage tank database.

Date of Government Version: 06/28/2018
Date Data Arrived at EDR: 02/05/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 31

Source: Department of Health Services
Telephone: 631-854-2516
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Varies

NY UST - SUFFOLK: Storage Tank Database

A listing of underground storage tank sites located in Suffolk County.

Date of Government Version: 06/28/2018
Date Data Arrived at EDR: 12/06/2018
Date Made Active in Reports: 02/07/2019
Number of Days to Update: 63

Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 01/14/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: No Update Planned

WESTCHESTER COUNTY:

NY AST - WESTCHESTER: Listing of Storage Tanks

A listing of aboveground storage tank sites located in Westchester County.

Date of Government Version: 01/28/2026
Date Data Arrived at EDR: 02/10/2026
Date Made Active in Reports: 02/26/2026
Number of Days to Update: 16

Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 01/22/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Semi-Annually

NY UST - WESTCHESTER: Listing of Storage Tanks

A listing of underground storage tank sites located in Westchester County.

Date of Government Version: 01/28/2026
Date Data Arrived at EDR: 02/10/2026
Date Made Active in Reports: 02/26/2026
Number of Days to Update: 16

Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 01/22/2026
Next Scheduled EDR Contact: 05/04/2026
Data Release Frequency: Semi-Annually

**OTHER DATABASE(S)**

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/02/2025
Date Data Arrived at EDR: 11/03/2025
Date Made Active in Reports: 01/23/2026
Number of Days to Update: 81

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/03/2026
Next Scheduled EDR Contact: 05/18/2026
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 03/25/2026
Next Scheduled EDR Contact: 07/13/2026
Data Release Frequency: Annually

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 12/29/2025
Next Scheduled EDR Contact: 04/20/2026
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/05/2026
Next Scheduled EDR Contact: 05/25/2026
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data
Hazardous waste manifest information.

Date of Government Version: 10/28/2019
Date Data Arrived at EDR: 10/29/2019
Date Made Active in Reports: 01/09/2020
Number of Days to Update: 72

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 12/29/2025
Next Scheduled EDR Contact: 04/20/2026
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 02/25/2026
Next Scheduled EDR Contact: 06/15/2026
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Providers
Source: Department of Health
Telephone: 212-676-2444

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands
Source: Department of Environmental Conservation
Telephone: 518-402-8961

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

**STREET AND ADDRESS INFORMATION**

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# GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

**TARGET PROPERTY ADDRESS**

13 CULVER ST AND 372 RIVERDALE AVE
372 RIVERDALE AVENUE
YONKERS, NY 10705

**TARGET PROPERTY COORDINATES**

| | |
|---|---|
| Latitude (North): | 40.919652 - 40° 55' 10.75'' |
| Longitude (West): | 73.900562 - 73° 54' 2.02'' |
| Universal Tranverse Mercator: | Zone 18 |
| UTM X (Meters): | 592579.9 |
| UTM Y (Meters): | 4530208.0 |
| Elevation: | 52 ft. above sea level |

**USGS TOPOGRAPHIC MAP**

| | |
|---|---|
| Target Property Map: | 50026538 YONKERS, NY |
| Version Date: | 2023 |

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW DIRECTION INFORMATION**

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

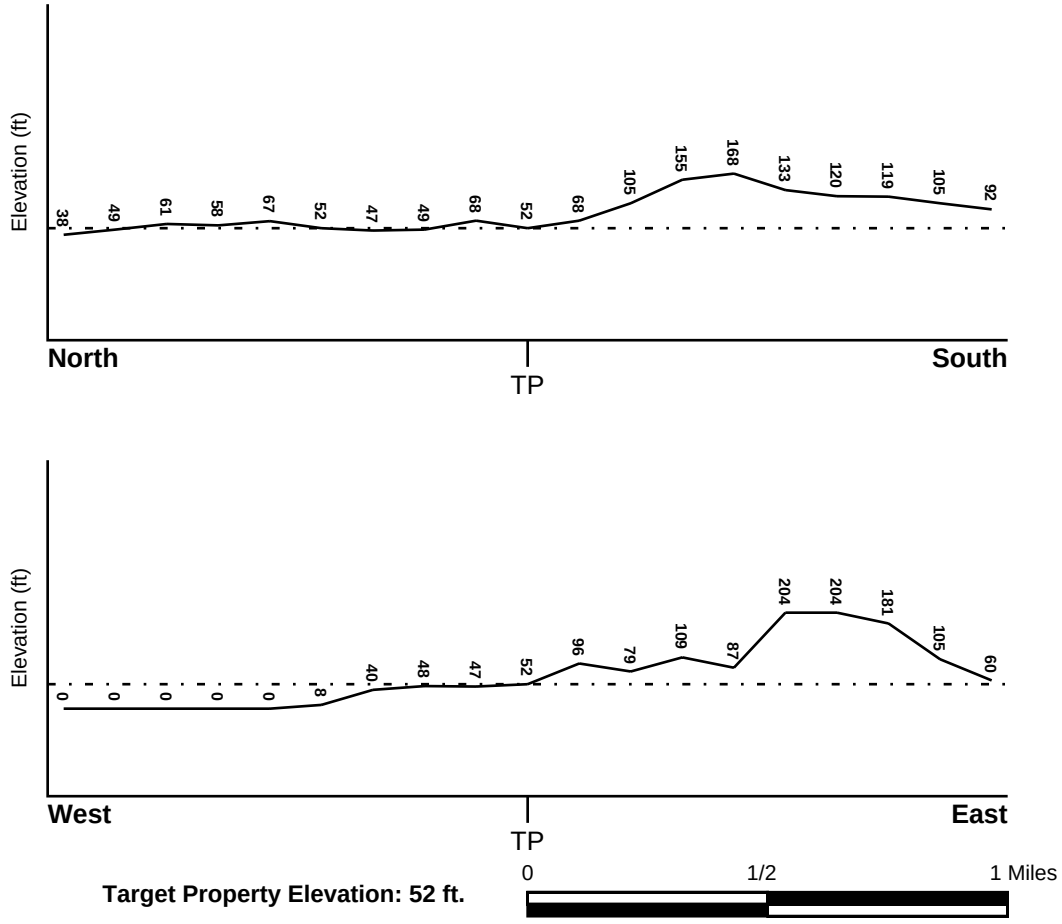
**TOPOGRAPHIC INFORMATION**

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

**TARGET PROPERTY TOPOGRAPHY**

General Topographic Gradient: General NNW

**SURROUNDING TOPOGRAPHY: ELEVATION PROFILES**




**Target Property Elevation: 52 ft.**

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**HYDROLOGIC INFORMATION**

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

**FEMA FLOOD ZONE**

| Flood Plain Panel at Target Property | FEMA Source Type |
|---|---|
| 36119C0317F | FEMA FIRM Flood data |

| Additional Panels in search area: | FEMA Source Type |
|---|---|
| 36119C0316F | FEMA FIRM Flood data |
| 3604970018F | FEMA FIRM Flood data |
| 34003C0220G | FEMA FIRM Flood data |

**NATIONAL WETLAND INVENTORY**

| NWI Quad at Target Property | NWI Electronic Data Coverage |
|---|---|
| YONKERS | YES - refer to the Overview Map and Detail Map |

**HYDROGEOLOGIC INFORMATION**

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

***Site-Specific Hydrogeological Data*:***

| | |
|---|---|
| Search Radius: | 1.25 miles |
| Status: | Not found |

**AQUIFLOW®**

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

| MAP ID | LOCATION FROM TP | GENERAL DIRECTION GROUNDWATER FLOW |
|---|---|---|
| Not Reported | | |

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

**GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

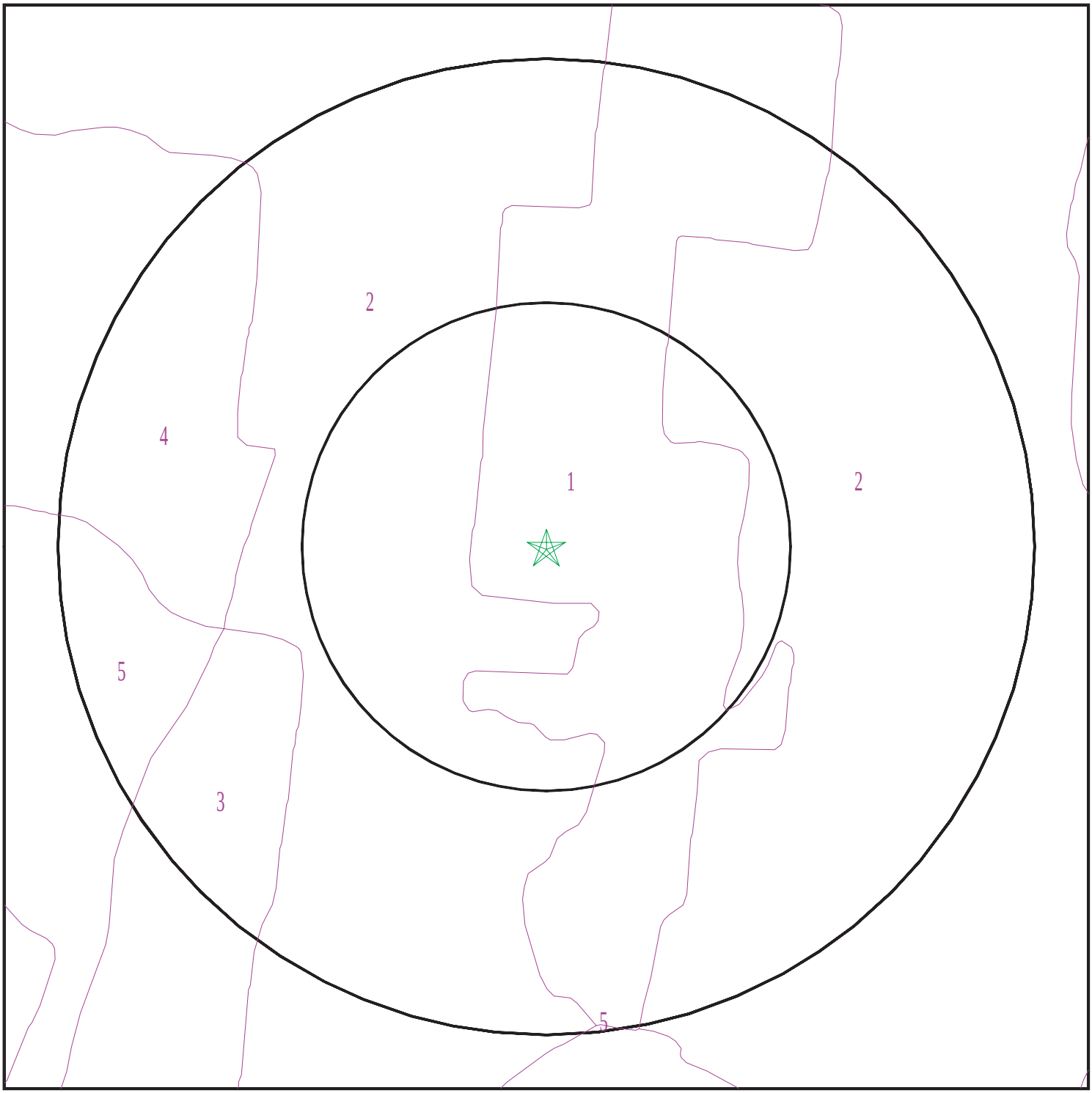
Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

**ROCK STRATIGRAPHIC UNIT** **GEOLOGIC AGE IDENTIFICATION**

| | | | |
|---|---|---|---|
| Era: | Paleozoic | Category: | Stratified Sequence |
| System: | Ordovicias | | |
| Series: | Lower Ordovician and Cambrian carbonate rocks | | |
| Code: | OC *(decoded above as Era, System & Series)* | | |

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

# SSURGO SOIL MAP - 8299671.2s




Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

| | | | |
|---|---|---|---|
| SITE NAME: | 13 Culver St and 372 Riverdale Ave | CLIENT: | Langan |
| ADDRESS: | 372 Riverdale Avenue<br>Yonkers NY 10705 | CONTACT: | Jennifer Armstrong |
| LAT/LONG: | 40.919652 / 73.900562 | INQUIRY #: | 8299671.2s |
| | | DATE: | April 01, 2026 1:43 pm |

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# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

**DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

---

**Soil Map ID: 1**

Soil Component Name: Urban land

Soil Surface Texture:
Hydrologic Group: Not reported

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

No Layer Information available.

---

**Soil Map ID: 2**

Soil Component Name: Urban land

Soil Surface Texture:
Hydrologic Group: Not reported

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

---

**Soil Map ID: 3**

Soil Component Name: Urban land

Soil Surface Texture:
Hydrologic Group: Not reported

Soil Drainage Class:

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 77 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

---

**Soil Map ID: 4**

Soil Component Name: Urban land

Soil Surface Texture:
Hydrologic Group: Not reported

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

---

**Soil Map ID: 5**

Soil Component Name: Urban land

Soil Surface Texture:
Hydrologic Group: Not reported

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

# GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

## LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## WELL SEARCH DISTANCE INFORMATION

| DATABASE | SEARCH DISTANCE (miles) |
|---|---|
| Federal USGS | 1.000 |
| Federal FRDS PWS | Nearest PWS within 1 mile |
| State Database | 1.000 |

### FEDERAL USGS WELL INFORMATION

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 1 | USGS40000835935 | 0 - 1/8 Mile SSW |
| 2 | USGS40000835940 | 1/4 - 1/2 Mile East |
| 3 | USGS40000835993 | 1/2 - 1 Mile NE |
| A4 | USGS40000835885 | 1/2 - 1 Mile WSW |
| A5 | USGS40000835886 | 1/2 - 1 Mile WSW |
| 6 | USGS40000836020 | 1/2 - 1 Mile North |

### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 7 | NY0002638 | 1/2 - 1 Mile ESE |

Note: PWS System location is not always the same as well location.

### STATE DATABASE WELL INFORMATION

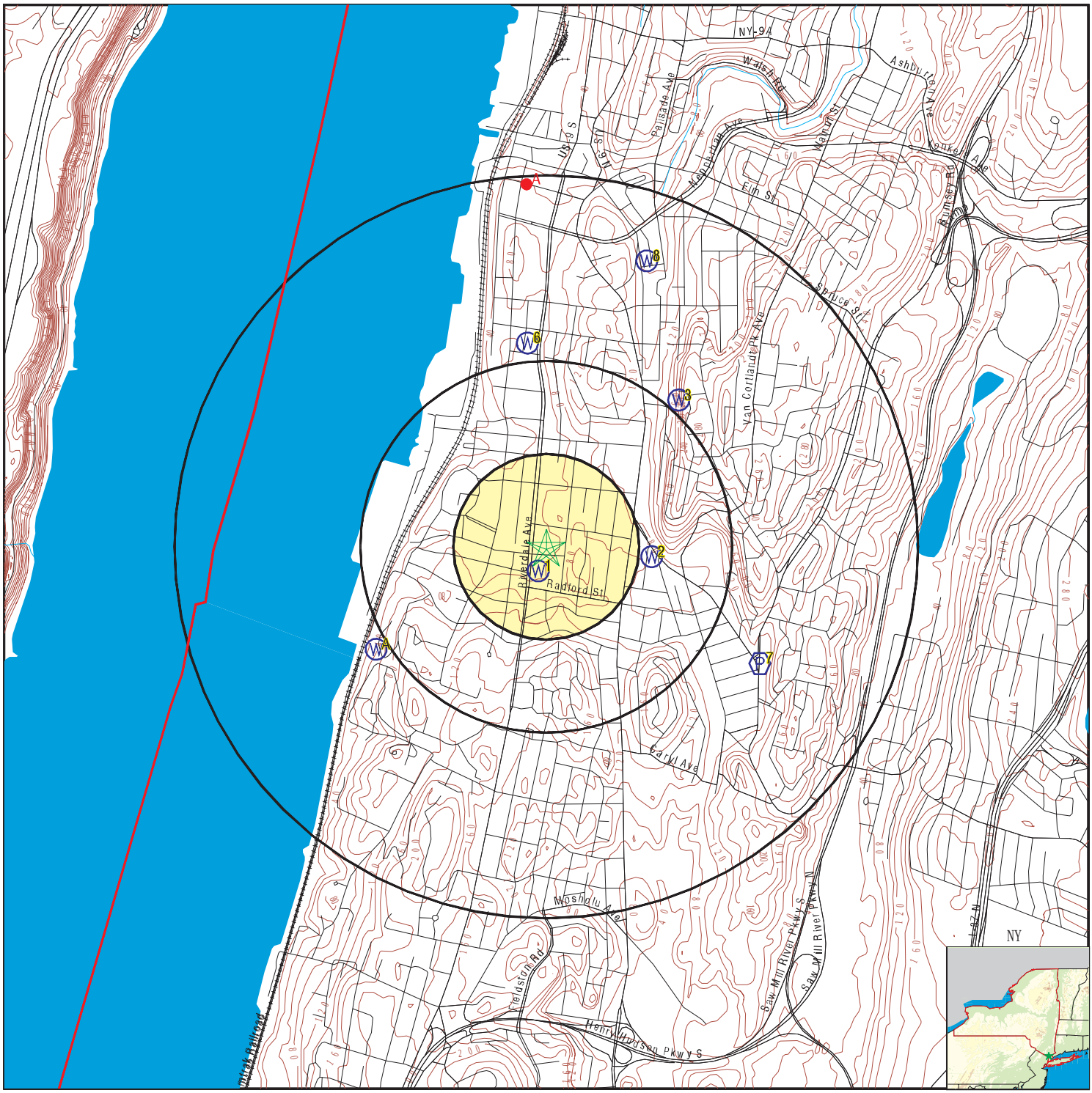
| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| 8 | NYWS50000131355 | 1/2 - 1 Mile NNE |

## OTHER STATE DATABASE INFORMATION

### STATE OIL/GAS WELL INFORMATION

| MAP ID | WELL ID | LOCATION FROM TP |
|---|---|---|
| A1 | NYOG20000045118 | 1/2 - 1 Mile North |
| A2 | NYOG20000045117 | 1/2 - 1 Mile North |
| A3 | NYOG20000045116 | 1/2 - 1 Mile North |
| A4 | NYOG20000045115 | 1/2 - 1 Mile North |
| A5 | NYOG20000045114 | 1/2 - 1 Mile North |
| A6 | NYOG20000045113 | 1/2 - 1 Mile North |

# PHYSICAL SETTING SOURCE MAP - 8299671.2s




- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

| | | | |
|---|---|---|---|
| SITE NAME: | 13 Culver St and 372 Riverdale Ave | CLIENT: | Langan |
| ADDRESS: | 372 Riverdale Avenue<br>Yonkers NY 10705 | CONTACT: | Jennifer Armstrong |
| | | INQUIRY #: | 8299671.2s |
| LAT/LONG: | 40.919652 / 73.900562 | DATE: | April 01, 2026 1:43 pm |

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# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**1**
**SSW**
**0 - 1/8 Mile**
**Higher**

**FED USGS** **USGS40000835935**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-NY | Organization Name: | USGS New York Water Science Center |
| Monitor Location: | WE 15 | Type: | Well |
| Description: | Not Reported | HUC: | 02030101 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | Not Reported | Formation Type: | Bedrock |
| Aquifer Type: | Not Reported | Construction Date: | Not Reported |
| Well Depth: | 250 | Well Depth Units: | ft |
| Well Hole Depth: | Not Reported | Well Hole Depth Units: | Not Reported |

| | | | |
|---|---|---|---|
| Ground water levels,Number of Measurements: | 1 | Level reading date: | 1955 |
| Feet below surface: | 15.00 | Feet to sea level: | Not Reported |
| Note: | Not Reported | | |

---

**2**
**East**
**1/4 - 1/2 Mile**
**Higher**

**FED USGS** **USGS40000835940**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-NY | Organization Name: | USGS New York Water Science Center |
| Monitor Location: | WE1165 | Type: | Well |
| Description: | Not Reported | HUC: | 02030101 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | Sand and gravel aquifers (glaciated regions) | | |
| Formation Type: | Sand and Gravel | Aquifer Type: | Not Reported |
| Construction Date: | Not Reported | Well Depth: | 76 |
| Well Depth Units: | ft | Well Hole Depth: | Not Reported |
| Well Hole Depth Units: | Not Reported | | |

| | | | |
|---|---|---|---|
| Ground water levels,Number of Measurements: | 1 | Level reading date: | 1955 |
| Feet below surface: | 15.00 | Feet to sea level: | Not Reported |
| Note: | Not Reported | | |

---

**3**
**NE**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000835993**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-NY | Organization Name: | USGS New York Water Science Center |
| Monitor Location: | WE1322 | Type: | Well |
| Description: | Not Reported | HUC: | 02030101 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | Not Reported | Formation Type: | Bedrock |
| Aquifer Type: | Not Reported | Construction Date: | Not Reported |
| Well Depth: | 170 | Well Depth Units: | ft |
| Well Hole Depth: | Not Reported | Well Hole Depth Units: | Not Reported |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**A4**
**WSW**
**1/2 - 1 Mile**
**Lower**

**FED USGS** **USGS40000835885**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-NY | Organization Name: | USGS New York Water Science Center |
| Monitor Location: | WE 30 | Type: | Well |
| Description: | Not Reported | HUC: | 02030101 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | Not Reported | Formation Type: | Bedrock |
| Aquifer Type: | Not Reported | Construction Date: | Not Reported |
| Well Depth: | 100 | Well Depth Units: | ft |
| Well Hole Depth: | Not Reported | Well Hole Depth Units: | Not Reported |

| | | | |
|---|---|---|---|
| Ground water levels,Number of Measurements: | 1 | Level reading date: | 1955 |
| Feet below surface: | 10.00 | Feet to sea level: | Not Reported |
| Note: | Not Reported | | |

---

**A5**
**WSW**
**1/2 - 1 Mile**
**Lower**

**FED USGS** **USGS40000835886**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-NY | Organization Name: | USGS New York Water Science Center |
| Monitor Location: | WE 31 | Type: | Well |
| Description: | Not Reported | HUC: | 02030101 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | Not Reported | Formation Type: | Bedrock |
| Aquifer Type: | Not Reported | Construction Date: | Not Reported |
| Well Depth: | 40 | Well Depth Units: | ft |
| Well Hole Depth: | Not Reported | Well Hole Depth Units: | Not Reported |

| | | | |
|---|---|---|---|
| Ground water levels,Number of Measurements: | 1 | Level reading date: | 1955 |
| Feet below surface: | 15.00 | Feet to sea level: | Not Reported |
| Note: | Not Reported | | |

---

**6**
**North**
**1/2 - 1 Mile**
**Higher**

**FED USGS** **USGS40000836020**

| | | | |
|---|---|---|---|
| Organization ID: | USGS-NY | Organization Name: | USGS New York Water Science Center |
| Monitor Location: | WE 8 | Type: | Well |
| Description: | Not Reported | HUC: | 02030101 |
| Drainage Area: | Not Reported | Drainage Area Units: | Not Reported |
| Contrib Drainage Area: | Not Reported | Contrib Drainage Area Unts: | Not Reported |
| Aquifer: | Not Reported | Formation Type: | Bedrock |
| Aquifer Type: | Not Reported | Construction Date: | Not Reported |
| Well Depth: | 422 | Well Depth Units: | ft |
| Well Hole Depth: | Not Reported | Well Hole Depth Units: | Not Reported |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

**7**
**ESE**
**1/2 - 1 Mile**
**Higher**

**FRDS PWS** **NY0002638**

| | | | |
|---|---|---|---|
| PWS ID: | NY0002638 | PWS type: | System Owner/Responsible Party |
| PWS name: | BOYAR IRA | PWS address: | C/O IRA BOYAR |
| PWS address: | 419 HALFMOON DRIVE | PWS city: | CROTON-ON-HUDSON |
| PWS state: | NY | PWS zip: | 10520 |
| PWS ID: | NY0002638 | PWS type: | System Owner/Responsible Party |
| PWS name: | BOYAR IRA | PWS address: | C/O IRA BOYAR |
| PWS address: | 419 HALFMOON DRIVE | PWS city: | CROTON-ON-HUDSON |
| PWS state: | NY | PWS zip: | 10520 |
| PWS ID: | NY0002638 | Activity status: | Active |
| Date system activated: | Not Reported | Date system deactivated: | Not Reported |
| Retail population: | 00000075 | System name: | BIRD AND BOTTLE |
| System address: | Not Reported | System address: | OLD ALBANY POST RD |
| System city: | GARRISON | System state: | NY |
| System zip: | 10524 | | |
| County FIPS: | 039 | City served: | PHILIPSTOWN (T) |
| Latitude: | 405454 | Longitude: | 0735324 |

---

**8**
**NNE**
**1/2 - 1 Mile**
**Higher**

**NY WELLS** **NYWS50000131355**

**WELLS:**

| | | | |
|---|---|---|---|
| DEC Well #: | WE06957 | Well Depth (ft): | 1055 |
| Bedrock Depth (ft): | 40 | Groundwater Depth (ft): | 27 |
| Casing Depth (ft): | 42 | Casing 1 Diameter (in): | 6 |
| Casing 1 Length (ft): | 43 | Casing 2 Diameter (in): | Not Reported |
| Casing 2 Length (ft): | Not Reported | Screened Well: | N |
| Screen Length (ft): | Not Reported | Avg Discharge Rate (gpm): | 15 |
| Well Purpose: | Not Reported | Driller Registration #: | NYRD01695 |
| Report Date: | Not Reported | Drilling Start Date: | 13-NOV-18 |
| Drilling Completion Date: | 15-NOV-18 | | |

Map ID
Direction
Distance

Database EDR ID Number

**A1**
**North**
**1/2 - 1 Mile**

**OIL_GAS** **NYOG20000045118**

**OIL_GAS:**

| | | | |
|---|---|---|---|
| API #: | 31119236710000 | Well Name: | W-7 |
| Well Type: | Geothermal | Well Status: | Active |
| Owner: | Main Street Lofts Yonkers LLC | Operator: | 2272 |
| Permit Date: | Not Reported | SPUD Date: | Not Reported |
| Completion Date: | 23-OCT-07 | Plug Date: | Not Reported |
| Field Name: | Not Applicable | Formation: | Fordham Gneiss |
| Borehole Slant: | Vertical | True Depth (ft): | 1500 |
| Measured Length (ft): | 1500 | | |
| URL: | http://extapps.dec.ny.gov/cfmx/extapps/GasOil/search/wells/index.cfm?api=31119236710000 | | |

---

**A2**
**North**
**1/2 - 1 Mile**

**OIL_GAS** **NYOG20000045117**

**OIL_GAS:**

| | | | |
|---|---|---|---|
| API #: | 31119236700000 | Well Name: | W-6 |
| Well Type: | Geothermal | Well Status: | Active |
| Owner: | Main Street Lofts Yonkers LLC | Operator: | 2272 |
| Permit Date: | Not Reported | SPUD Date: | Not Reported |
| Completion Date: | 23-OCT-07 | Plug Date: | Not Reported |
| Field Name: | Not Applicable | Formation: | Fordham Gneiss |
| Borehole Slant: | Vertical | True Depth (ft): | 1500 |
| Measured Length (ft): | 1500 | | |
| URL: | http://extapps.dec.ny.gov/cfmx/extapps/GasOil/search/wells/index.cfm?api=31119236700000 | | |

---

**A3**
**North**
**1/2 - 1 Mile**

**OIL_GAS** **NYOG20000045116**

**OIL_GAS:**

| | | | |
|---|---|---|---|
| API #: | 31119236690000 | Well Name: | W-5 |
| Well Type: | Geothermal | Well Status: | Active |
| Owner: | Main Street Lofts Yonkers LLC | Operator: | 2272 |
| Permit Date: | Not Reported | SPUD Date: | Not Reported |
| Completion Date: | 23-OCT-07 | Plug Date: | Not Reported |
| Field Name: | Not Applicable | Formation: | Fordham Gneiss |
| Borehole Slant: | Vertical | True Depth (ft): | 1500 |
| Measured Length (ft): | 1500 | | |
| URL: | http://extapps.dec.ny.gov/cfmx/extapps/GasOil/search/wells/index.cfm?api=31119236690000 | | |

---

**A4**
**North**
**1/2 - 1 Mile**

**OIL_GAS** **NYOG20000045115**

**OIL_GAS:**

| | | | |
|---|---|---|---|
| API #: | 31119236680000 | Well Name: | W-4 |
| Well Type: | Geothermal | Well Status: | Active |
| Owner: | Main Street Lofts Yonkers LLC | Operator: | 2272 |
| Permit Date: | Not Reported | SPUD Date: | Not Reported |
| Completion Date: | 26-OCT-07 | Plug Date: | Not Reported |
| Field Name: | Not Applicable | Formation: | Fordham Gneiss |
| Borehole Slant: | Vertical | True Depth (ft): | 1500 |
| Measured Length (ft): | 1500 | | |
| URL: | http://extapps.dec.ny.gov/cfmx/extapps/GasOil/search/wells/index.cfm?api=31119236680000 | | |

---

**A5**
**North** **OIL_GAS** **NYOG20000045114**
**1/2 - 1 Mile**

**OIL_GAS:**

| | | | |
|---|---|---|---|
| API #: | 31119236670000 | Well Name: | W-3 |
| Well Type: | Geothermal | Well Status: | Active |
| Owner: | Main Street Lofts Yonkers LLC | Operator: | 2272 |
| Permit Date: | Not Reported | SPUD Date: | Not Reported |
| Completion Date: | 26-OCT-07 | Plug Date: | Not Reported |
| Field Name: | Not Applicable | Formation: | Fordham Gneiss |
| Borehole Slant: | Vertical | True Depth (ft): | 1500 |
| Measured Length (ft): | 1500 | | |
| URL: | http://extapps.dec.ny.gov/cfmx/extapps/GasOil/search/wells/index.cfm?api=31119236670000 | | |

---

**A6**
**North** **OIL_GAS** **NYOG20000045113**
**1/2 - 1 Mile**

**OIL_GAS:**

| | | | |
|---|---|---|---|
| API #: | 31119236660000 | Well Name: | W-2 |
| Well Type: | Geothermal | Well Status: | Active |
| Owner: | Main Street Lofts Yonkers LLC | Operator: | 2272 |
| Permit Date: | Not Reported | SPUD Date: | Not Reported |
| Completion Date: | 25-OCT-07 | Plug Date: | Not Reported |
| Field Name: | Not Applicable | Formation: | Fordham Gneiss |
| Borehole Slant: | Vertical | True Depth (ft): | 1500 |
| Measured Length (ft): | 1500 | | |
| URL: | http://extapps.dec.ny.gov/cfmx/extapps/GasOil/search/wells/index.cfm?api=31119236660000 | | |

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
# RADON

**AREA RADON INFORMATION**

State Database: NY Radon

Radon Test Results

| County | Town | Num Tests | Avg Result | Geo Mean | Max Result |
|---|---|---|---|---|---|
| WESTCHESTER | BEDFORD | 108 | 2.44 | 1.65 | 21.7 |
| WESTCHESTER | CORTLANDT | 169 | 5.15 | 2.22 | 95.4 |
| WESTCHESTER | EASTCHESTER | 76 | 2.89 | 1.75 | 41.9 |
| WESTCHESTER | GREENBURGH | 222 | 2.26 | 1.46 | 21.8 |
| WESTCHESTER | HARRISON | 69 | 3.3 | 2.07 | 42.3 |
| WESTCHESTER | LEWISBORO | 72 | 3.91 | 2.61 | 19.2 |
| WESTCHESTER | MAMARONECK | 123 | 4 | 2.42 | 35.9 |
| WESTCHESTER | MT. KISCO | 38 | 2.33 | 1.72 | 9.3 |
| WESTCHESTER | MT. PLEASANT | 172 | 2.13 | 1.43 | 17.1 |
| WESTCHESTER | MT. VERNON | 53 | 2.82 | 1.65 | 32 |
| WESTCHESTER | NEW CASTLE | 134 | 2.2 | 1.46 | 31.7 |
| WESTCHESTER | NEW ROCHELLE | 127 | 1.92 | 1.31 | 13.8 |
| WESTCHESTER | NO. CASTLE | 64 | 3.49 | 2.25 | 16.5 |
| WESTCHESTER | NO. SALEM | 56 | 3.78 | 2.56 | 25.7 |
| WESTCHESTER | OSSINING | 65 | 2.08 | 1.39 | 10.9 |
| WESTCHESTER | PEEKSKILL | 47 | 3.66 | 2.34 | 19.9 |
| WESTCHESTER | PELHAM | 26 | 2.5 | 1.91 | 9.1 |
| WESTCHESTER | POUND RIDGE | 34 | 3.37 | 2.22 | 18.5 |
| WESTCHESTER | RYE | 98 | 2.24 | 1.63 | 9.5 |
| WESTCHESTER | SCARSDALE | 138 | 2.35 | 1.63 | 22.4 |
| WESTCHESTER | SOMERS | 72 | 3.89 | 2.82 | 21.3 |
| WESTCHESTER | WHITE PLAINS | 132 | 2.76 | 1.48 | 65.2 |
| WESTCHESTER | YONKERS | 153 | 2.23 | 1.37 | 16 |
| WESTCHESTER | YORKTOWN | 181 | 2.7 | 1.72 | 27.2 |

Federal EPA Radon Zone for WESTCHESTER County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

---

Federal Area Radon Information for WESTCHESTER COUNTY, NY

Number of sites tested: 650

| Area | Average Activity | % <4 pCi/L | % 4-20 pCi/L | % >20 pCi/L |
|---|---|---|---|---|
| Living Area | 0.930 pCi/L | 97% | 3% | 0% |
| Basement | 1.730 pCi/L | 84% | 13% | 2% |

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

## HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands
Source: Department of Environmental Conservation
Telephone: 518-402-8961

## HYDROGEOLOGIC INFORMATION

AQUIFLOW$^{R}$ Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

New York Public Water Wells
Source: New York Department of Health
Telephone: 518-458-6731

## OTHER STATE DATABASE INFORMATION

Oil and Gas Well Database
Source: Department of Environmental Conservation
Telephone: 518-402-8072
These files contain records, in the database, of wells that have been drilled.

RADON

State Database: NY Radon
Source: Department of Health
Telephone: 518-402-7556
Radon Test Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

**STREET AND ADDRESS INFORMATION**

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# APPENDIX G

# JENNIFER ARMSTRONG, LEED AP

## SENIOR PROJECT SCIENTIST

## ENVIRONMENTAL SCIENTIST & REMEDIAL OVERSIGHT

Ms. Armstrong has experience working on environmental projects in New York. She has conducted Phase I and II Environmental Site Assessments, remedial investigations, soil vapor and indoor air quality surveys, and waste characterization investigations. She has also developed remedial investigation and remedial action work plans and managed groundwater monitoring programs. Her field experience includes soil, soil vapor, and groundwater sampling, indoor air investigations, remedial excavation oversight, and Community Air Monitoring Program (CAMP) management. Ms. Armstrong also has several years of experience in evaluating asbestos consultants and contractors.



### SELECTED PROJECTS

- Highline 131410, Phase I ESA and Phase II ESI, Hotel Development, New York, NY
- NYC School Construction Authority, Phase I ESAs for Various Sites, New York, NY
- Freshkills Landfill, Public Relations, and Operations and Maintenance Plan Preparation Staten Island, NY
- Distribution Facility, Phase I & Phase II ESA and Regulatory Compliance, Bohemia, NY
- Floral Park Storage Facility, Phase I and Phase II ESA
- Garden City Phase I ESAs at two sites, including part of a Superfund Site, Garden City, NY
- Huntington Station Storage Facility, Phase I and II ESA, Huntington Station, NY
- Huntington Station Superfund Due Diligence, Huntington Station, NY
- 144-150 Barrow Street, BCP Management, New York, NY
- 538-540 Hudson Street, BCP Management, New York, NY
- 572 Eleventh Avenue, City VCP Management, New York, NY
- 156-162 Perry Street, BCP Program Management, New York, NY
- Mail Distribution Facility at 57th Avenue, Capping Plan and Implementation, Long Island City, NY
- SJM Storage, 607 West 47th Street, E-designated Site Management, New York, NY
- Con Edison, Spill Delineation and Product Recovery, Governors Island, NY
- Consolidated Edison, Groundwater Sampling and Monitoring Reports, Governors Island, New York, NY
- Gowanus Village, Various Locations, Brooklyn, NY
- West & Watts Development, Phase I and II Environmental, Waste Characterization, and BCP Management, New York, NY
- ACME Greenpoint, Various Locations, Brooklyn, NY
- Consolidated Edison, Atlantic Ave Station, Brooklyn, NY
- CUNY John Jay College Expansion, CAMP Management, New York, NY
- Pelham Plaza, MGP Remediation Oversight, Pelham Manor, NY

### EDUCATION

B.S., Environmental Science
Marist College

### PROFESSIONAL REGISTRATION

LEED Accredited Professional (LEED AP)

Certified Hazardous Materials Manager

### AFFILIATIONS

United States Green Building Council

Urban Land Institute

- Con Edison East 74th Street Steam Generation Plant, Remediation Investigations, New York, NY
- MODA Apartments, Waste Characterization, and Remediation Oversight, Jamaica, NY
- Bronx Terminal Market, Oversight for Remedial Excavation and Backfilling Bronx, NY
- Pier 4, Spill Remediation Oversight, Bronx, NY
- 40 Bond Street, Site Management Planning, New York, NY
- Bronx Mental Health Redevelopment, Phase I ESA, Bronx, NY
- Silvercup West, Brownfield Program Application and Waste Characterization Investigation, Long Island City, NY
- Foxgate/MREC, Due Diligence and Solid Waste Compliance, Central Islip, NY
- Garvies Point Bulkhead, Glen Cove, NY
- Johnson & Hoffman Metal Stamping Facility, Environmental Compliance, Carle Place, NY
- The Beacon, Hazmat, New York, NY

# APPENDIX B

# HEALTH AND SAFETY PLAN

DRAFT

# HEALTH AND SAFETY PLAN

# FOR

# 13 CULVER STREET &
# 372 RIVERDALE AVENUE
# YONKERS, NEW YORK
# Municipality of Yonkers Tax Map
# Section 1, Block 129, Lots 26 and 30
# IDs 1-129-26 and 1-129-30

***Prepared for***

**Claudius Development LLC**
**17 Washington Avenue**
**Pleasantville, New York**

***Prepared by:***

**Langan Engineering, Environmental, Surveying**
**Landscape Architecture and Geology**
**368 Ninth Avenue, 8th Floor**
**New York, New York 10001**

LANGAN

**May 2026**
**Langan Project No. 190141301**

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**Attachment E** Safety Data Sheets*
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***** Items to be posted prominently on-site or made readily available to personnel.

# 1.0 INTRODUCTION

## 1.1 General

This HEALTH AND SAFETY PLAN (HASP) was developed to address disturbance of known and reasonably anticipated subsurface contaminants and comply with Occupational Safety and Health Administration (OSHA) Standard 29 Code of Federal Regulation (CFR) 1910.120(b)(4), Hazardous Waste Operations and Emergency Response during anticipated site work for the property defined as 13 Culver Street and 372 Riverdale Avenue, located in Yonkers, New York. The site is identified on Municipality of Yonkers Tax Map as Section 1, Block 129, Lots 26 and 30 (IDs 1-129-26 and 1-129-30).

This HASP provides the minimum requirements for implementing site operations during future remedial measures. All contractors performing work on this site must implement their own HASP that, at a minimum, adheres to this HASP. The contractor is responsible for their own health and safety and that of their subcontractors. Langan personnel will implement this HASP while onsite.

The content of this HASP may change or undergo revision based upon additional information made available to health and safety personnel, monitoring results, or changes in the work plan.

## 1.2 Site Location and Background

The site has a combined area of about 1.02 acres and includes 372 Riverdale Avenue (Yonkers Tax ID 1.-129-30) and 13 Culver Street (Yonkers Tax ID 1.-129-26) within an urban block setting. 372 Riverdale Avenue/Lot 30 is improved with a 1-story vacant auto repair building with asphalt paved parking areas. 13 Culver Street/Lot 26 is vacant following demolition of a residential building. Access is to 372 Riverdale Avenue/Lot 30 is provided from Riverdale Avenue and Culver Street and access to 13 Culver Street/Lot 26 is provided via a gate on Culver Street. The site sits at an elevation of about 50 feet above mean sea level and is generally flat with a gentle slope toward the Hudson River (west), the river is approximately 2,500 feet to the west of the site.

The site is vacant. The most recent tenant vacated 372 Riverdale Avenue/Lot 30 is apparently being evicted. The site was developed with several residential dwellings with detached garages or stables as early as 1897. By 1917, several store fronts were located along Riverdale Avenue, and a Cast Stone Products building was located at the east half of 13 Culver Street/Lot 26. The stone products business was no longer preset in 1951. Most of the residential structures at 372 Riverdale Avenue/Lot 30 were demolished between 1966 and 1974 and the current auto repair building was constructed by 1974 with only two remaining residences in the northwest part of the Lot. The two remaining residences on Lot 30 were demolished by 1984, and that portion of

the lot was paved with asphalt for additional parking. Auto garages on the east half of 13 Culver Street/Lot 26 were demolished by the 1970s and the remaining residence in the western part of the lot was demolished between 2017 and 2021. A site location map is provided as Figure 1.

## 1.3 Summary of Work Tasks

### 1.3.1 Geophysical Investigation - Underground Utility Clearance Policy

Prior to the commencement of intrusive field activities (i.e., all soil boreholes, test pits, or excavations); Langan field engineers will follow the Langan Underground Utility Clearance Policy including the retaining one or more geophysical consultants, if required, to conduct geophysical surveys using ground penetrating radar (GPR) and electromagnetic detection equipment. The application of the Langan Underground Utility Clearance policy is mandatory unless a site wide or a specific location exemption has been granted in writing by the principal-in-charge (PIC).

The objective of a geophysical survey is to identify any underground storage tank (UST) structures, drains, underground utilities, and other subsurface anomalies that may be encountered during an intrusive investigation. Langan personnel will observe the geophysical survey of each location and confirm the locations are both accessible and free of potential utility or other known or suspected subsurface structures. There will be no exemption to this section unless granted by written approval by the PIC.

### 1.3.2 "Soft-Dig" Clearance of Borehole Locations

In accordance with Langan's Underground Utility Clearance Policy, Langan will instruct the drilling or excavation contractor to "Soft-Dig" each target soil boring, test pit, or excavation location as specified in Section 1.3.1. Soft dig is defined as using a vacuum system (with or without an air knife) or hand auger to clear soil from the proposed soil boring location to a depth of 5-feet. When excavating a test pit or larger excavation, the exaction contractor will "peal" away thin layers of soil with their excavator or shovel to daylight potential underground structures until achieving the required 5-feet depth. If using an excavator, the contractor must have a worker observing the excavator bucket/shovel warning the operator when the bucket/shovel encounters a possible underground structure. At which point, the potential structure must be hand shoveled until it is fully daylighted. Langan personnel will confirm that the "soft dig" activities are completed to these specifications.

### 1.3.3 Day Lighting Excavation and Soil Screening

Langan may retain one or more excavation contractors to daylight buried unidentified structures. The purpose of the daylighting is to confirm if these structures are subsurface structures of

concern including USTs, utilities sewer lines, storm water drains, electrical, gas or other utility line as well as other artifacts pertinent to the work plan. The excavation contractors will contact the appropriate utility mark-out authority and make available to their staff the verification number and effective dates.

The excavation contractor will employ "soft dig" methods as defined in Section 1.3.2. Langan may screen excavated soil for visual, olfactory, and instrumental indicators suggestive of a potential chemical or petroleum release. Instrument screening for the presence of volatile organic compounds (VOC) may be performed with a duly calibrated photoionization detector (PID). Contractors will notify Langan personnel if they identify indications suggestive of a potential chemical or petroleum release. Contaminated material shall be handled, and property disposed in accordance with federal, state and city regulations, criteria, and guidelines.

### 1.3.4 Soil Investigation and Sampling

Langan may retain a drilling contractor to advance soil boreholes to a depth below grade surface (bgs) specified in the work plan. Borings will be installed at the approximate locations indicated in Langan's work plan but may be moved in the field based on utility clearance and accessibility. The drilling contractor will contact the appropriate utility mark-out authority and make available to their drilling staff the verification number and effective dates. Langan will record the verification number and effective dates from the drillers. Langan will also note the location of marked out utilities on the site plan and scan the data into the project folder.

Langan personnel will screen soil for visual, olfactory, and instrumental indicators suggestive of a potential petroleum release. Instrument screening for the presence of VOC may be performed with a duly field calibrated PID (or equivalent). Langan personnel will collect soil samples from the proposed locations following the sampling plan outlined in the work plan. The borings will be filled with clean soil cuttings, clean sand or bentonite grout and capped at grade to match the surrounding surface after samples are collected.

Soil samples will be submitted to a specific lab per the work plan or to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory and analyzed in accordance with work plan specifications.

### 1.3.5 Groundwater Investigation and Sampling

Langan may complete a groundwater investigation. Langan may sample existing monitoring wells, or those soil investigation borings converted into groundwater monitoring wells. Groundwater samples will be collected from one or more of the new and if available, pre-existing monitoring wells in accordance with the Langan Low Flow Groundwater Sampling SOP (SOP

#12). Groundwater samples will be submitted to an approved laboratory and analyzed for constituents as specified in the work plan. Temporary monitoring wells will be plugged and abandoned during the investigation in the manner defined in the work plan. Permanent monitoring wells will be completed with a road box set in concrete. Permanent monitoring wells will be eventually backfilled and abandoned in accordance with State and Local regulations.

Groundwater samples will be submitted to a NYSDOH ELAP-certified laboratory and analyzed in accordance with work plan specifications.

### 1.3.6 Groundwater/Product Gauging

Langan may gauge one or more of the observation/monitoring wells to collect synoptic head data or determine the presence of product. When gauging, Langan may also survey head space VOCs within the well using a duly calibrated PID. When collected, gauging data will be based on the northernmost point at top of casing (TOC) using an interface probe (IP) capable of determining the presence of free product in the monitoring well as light non-aqueous phase liquid (LNAPL) at the top of the water column. If gauging for dense non-aqueous phase liquid (DNAPL) at the base of the monitoring well, the IP may not be appropriate. The field engineer will coordinate with the project team to devise an alternative method to gauge the thickness of DNAPL at base of the well. Langan will decontaminate gauging equipment between wells as required by the work plan.

### 1.3.7 Product Bailing

If free product is observed in any of the monitoring wells, Langan may bail or contract a 3$^{rd}$ part to remove free product from on-site monitoring wells as part of the work plan. Langan or its contractor may use a dedicated bailer or similar device, peristaltic pump or submersible to extract the observed free product. Langan will record the volume of product and groundwater recovered. Recovered free product and groundwater will be drummed and handled in accordance with procedures outlined in the work plan.

### 1.3.8 Sub Slab or Soil Vapor Point Installation and Sampling

Langan (or its contractor) may install one or more sub-slab or soil vapor points at selected locations. If installed, the sub-slab points will be set at or just below the bottom of the slab in accordance with the work plan. The sub-slab points may be installed using an electric hammer drill to advance small diameter boreholes through the concrete (or equivalent) slab as defined in the work plan. The borings will terminate in and sample from the gravel substrate below the slab. Conditions in the field may require adjustment of sampling locations.

Langan personnel (or contractor) may install VaporPin® vapor points (or equivalent) in accordance with the manufacturer's instructions. If no point is used, Langan (or contractor) will set a sampling tube defined as an open-ended Teflon™-lined polyethylene tubing (or equivalent tubing as approved by the project manager [PM]). The sampling tube will be set either within the base of the concrete slab or within the support gravel underlying the slab.

When using the VaporPin® or equivalent, the installation sleeve will provide the necessary annulus seal required for subsequent sampling. However, if a sampling tube as defined above is used, the annulus at the top of the concrete slab will be filled with bentonite or food grade clay to seal the slab. A sand pack is not required for sub-slab vapor sampling. Unless specified by the work plan, the sub slab points are temporary and will be pulled after the sampling event and the hole will be patched at grade with material like the surrounding surface.

Langan personnel will confirm that the soil vapor points (implants) are 2-inches in length constructed of polyethylene material and are connected to the surface by Teflon™-line polyethylene material (equivalent materials for the point and tubing are acceptable as approved by the PM). The annulus around the implant will be filled with clean sand to 6-inches above the implant. A 1-foot bentonite slurry will be applied to the top of the sand up to seal the sampling points. The remaining soil vapor point annulus may be backfilled with clean cuttings are sand to grade. Unless specified by the work plan, the vapor points are temporary and will be pulled after the sampling event and the hole will be patched at grade with material like the surrounding surface.

Vapor samples will be collected in accordance with following guidance including Final Guidance for Evaluating Soil Vapor Intrusion published by the New York State Department of Health (NYSDOH) in October 2006, Langan's Sub-Slab Vapor Sampling SOP (SOP #14) and as specified in the work plan. In addition, ambient air and indoor air samples may be collected for use as a comparison sample. As part of the indoor air sampling program, Langan personnel may complete a building inventory inspection. The inspection may take place prior to the commencement of actual field sampling. Vapor samples may be submitted to a NYSDOH ELAP-certified laboratory and analyzed in accordance with work plan specifications.

### 1.3.9 Observation/Monitoring Well Plugging and Abandonment

While not scheduled, existing observation/monitoring wells may be plugged or abandoned as specified in the work plan. Plugging and abandonment will be in accordance with federal and state requirements. Langan may retain a drilling contractor to complete the plugging and abandonment activities. The contractor will contact the appropriate utility mark-out authority and make available to their field staff the verification number and effective dates. Langan may observe the plugging and abandonment of one or more observation/monitoring wells to

document that the plugging and abandonment activities were completed in accordance with the work plan and regulations.

### 1.3.10 QA/QC Sampling

Samples for quality assurance/quality control [QA/QC] may also be collected and submitted to an approved laboratory and analyzed in accordance with work plan specifications. Information regarding the QA/QC samples including required method of analysis may be included in the same COC as the soil samples unless otherwise instructed by the work plan.

### 1.3.11 Equipment Decontamination

Before the start of the day's sampling and after sampling each run, sampling equipment will be decontaminated by the decontamination process outlined Attachment B - Decontamination Procedures. Decontamination waste and purge water will be temporarily stored on site pending analytical results.

### 1.3.12 Management of Investigative-Derived Waste

The investigative-derived waste (IDW) generated during this investigation will be contained in DOT-approved 55-gallon drums. The drums will be temporarily stored on the site or as directed by the client representative. All drums will be filled between two-thirds full to allow easy maneuvering during drum pickup and disposal. Drum labels are to be provided by Langan (Environmental Closet). All drums will be labeled as "IDW Pending Analysis" until sample data are reported from the laboratory. Drum labels will include date filled and locations where waste was generated along with the standard information required by the labels in accordance with the Langan SOP09, Drum Labeling.

Closed top drums are to be used to store liquids. Debris, including plastic sheeting, polyethylene tubing, personal protection equipment (PPE), decontamination debris, etc. will be segregated from and disposed of in large heavy duty garbage bags and disposed of at the site. Excess unused glassware should be returned to the lab along with the last day of collection samples.

### 1.3.13 Drum Sampling

Langan personnel may collect drum samples, as required, prior to off-site drum disposal. Samples will be placed into laboratory-supplied batch-certified clean glassware and submitted to an approved laboratory and analyzed in accordance with work plan specifications, if required.

### 1.3.14 Surveying

Surveying activities may be completed by Langan. Surveying will be conducted by licensed surveyors.

## 2.0 IDENTIFICATION OF KEY PERSONNEL/HEALTH AND SAFETY PERSONNEL

The following briefly describes the health and safety (H&S) designations and general responsibilities that may be employed for this site. The titles have been established to accommodate the project needs and requirements and ensure the safe conduct of site activities. The H&S personnel requirements for a given work location are based on the proposed site activities.

### 2.1 Langan Project Manager

The Langan Environmental Project Manager (PM) is Emily Butler, her responsibilities include:

- Ensuring that this HASP is developed, current, and approved prior to on-site activities.
- Ensuring that the tasks in the project are performed in a manner consistent with Langan's comprehensive *Health and Safety Program for Hazardous Waste Operations* and this HASP.

### 2.2 Langan Corporate Construction Health and Safety Manager

The Langan Corporate Construction Health and Safety Manager is Tony Moffa. His responsibilities include:

- Updating the *Health and Safety Program for Hazardous Waste Operations*.
- Assisting the site Construction Health and Safety Officer (HSO) with the development of the HASP, updating HASP as dictated by changing conditions, job site inspection results, etc., and approving changes to this HASP.
- Assisting the HSO in the implementation of this HASP and conducting Jobsite Safety Inspections and assisting with communication of results and correction of shortcomings found.
- Maintaining records on personnel (medical evaluation results, training and certifications, accident investigation results, etc.).

### 2.3 Langan Site Health & Safety Officer

The Langan site HSO is William Bohrer. His responsibilities include:

- Participating in the development and implementation of this HASP.
- When on-site, assisting the Langan Field Team Leader in conducting Tailgate Safety Meetings and Jobsite Safety Inspections and correcting any shortcomings in a timely manner.
- Ensuring that proper PPE is available, worn by employees, and properly stored and maintained.
- Controlling entry into and exit from the site contaminated areas or zones.
- Monitoring employees for signs of stress, such as heat stress, fatigue, and cold exposure.
- Monitoring site hazards and conditions.
- Knowing (and ensuring that all site personnel also know) emergency procedures, evacuation routes, and the telephone numbers of the ambulance, local hospital, poison control center, fire department, and police department.
- Resolving conflicts that may arise concerning safety requirements and working conditions.
- Reporting all incidents, injuries, and near misses to the Langan Incident/Injury Hotline immediately and the client representative.

## 2.4 Langan Field Team Leader Responsibilities

The Langan Field Team Leader (FTL) is to be determined prior to the start of field activities. The Field Team Leader's responsibilities include:

- The management of the day-to-day site activities and implementation of this HASP in the field.
- Participating in and/or conducting Tailgate Safety Meetings and Jobsite Safety Inspections and correcting any shortcomings in a timely manner.
- When a Community Air Monitoring Operating Program (CAMP) is part of the scope, the FTL will set up and maintain community air monitoring activities and instruct the responsible contractor to implement organic vapor or dust mitigation when necessary.

## 2.5 Contractor Responsibilities

## 2.5 Contractor Responsibilities

The contractor must develop and implement their own HASP for their employees, their subcontractors, and consultants. The contractor is responsible for their own health and safety and that of their subcontractors. Contractors operating on the site must designate their own FTL, HSO, and Health and Safety Manager (HSM). The contractor's HASP will be at least as stringent as this HASP. The contractor must be familiar with and abide by the requirements outlined in their own HASP. A contractor may elect to adopt Langan's HASP as its own if it has given written

notification to Langan, but where Langan's HASP excludes provisions pertinent to the contractor's work (i.e., confined space entry); the contractor must provide written addendums to this HASP. Additionally, the contractor must:

- Ensure their employees are trained in the use of all appropriate PPE for the tasks involved.
- Notify Langan of any hazardous material brought onto the job site or site-related area, the hazards associated with the material and must provide a safety data sheet (SDS) for the material.
- Have knowledge of, understand, and abide by all current federal, state, and local health and safety regulations pertaining to the work.
- Ensure their employees handling hazardous materials, if identified at the Site, have received current training at the appropriate levels of 29 CFR 1910.120, *Hazardous Waste Operations and Emergency Response* (HAZWOPER) if hazardous waste is identified at the Site,
- Ensure their employees handling hazardous materials, if identified at the Site, have been fit-tested within the year on the type of respirator they will wear.
- Ensure all air monitoring is in place pertaining to the health and safety of their employees as required by OSHA 1910.120; and
- All contractors must adhere to all federal, state, and local regulatory requirements.

## 3.0 TASK/OPERATION SAFETY AND HEALTH RISK ANALYSES

A Task-Hazard Analysis (Table 1) was completed for general hazards that may be encountered at the Site. The potential contaminants that might be encountered during the field activities and the exposure limits are listed in Table 2. The Safety Data Sheets for each potential contaminant listed in Table 2 are included in Attachment E.

### 3.1 Specific Task Safety Analysis

#### 3.1.1 Geophysical Survey

Langan personnel are not permitted to operate or otherwise handle geophysical equipment including GPR/electromagnetic detection equipment used for surface utility clearance. When conducting surface utility clearance surveys, the locations of the boreholes, test pits, and other excavations must be fully marked out. In addition, possible detections by the utility clearance contractor of utilities and other artifacts must also be marked out. Markings should include paint, flags, or color tape (when marking indoor locations that the client has specifically requested not be marked with paint). This information must also be added to the site map.

### 3.1.2 "Soft Dig" Clearance of Borehole Locations

"Soft-Dig" clearance will be completed by the contractors. Langan personnel are not permitted to operate or otherwise handle the contractor's equipment. Langan will update the site map to include the locations of the cleared borehole locations as well as utilities and other artifacts that may interfere with the subsurface investigation.

### 3.1.3 Daylighting Test Pit

Excavation daylighting must abide by OSHA excavation standards (Part 1926.651) and conform to the Langan Underground Utility Clearance Policy. Daily inspections of excavations, the adjacent areas, and protective systems shall be made by a competent person for evidence of a situation that could result in cave-ins, indications of failure of protective systems, hazardous atmospheres, or other hazardous conditions. An inspection shall be conducted by the competent person prior to the start of work and as needed throughout the shift. Inspections shall also be made after every rainstorm or other hazard increasing occurrence.

No one is to enter an excavation deeper than 5 feet unless the excavation walls are properly sloped in accordance with OSHA regulations. If sampling is required, the sample for excavations deeper than 5 feet without protective systems (sloping) as defined by OSHA are to be collected using suitable mechanical excavation equipment (backhoe or equivalent). When collecting soil samples, Langan will wear chemical resistant gloves in addition to the standard PPE. Langan personnel do not operate excavation equipment. This task is to be completed by an authorized operator approved by the contractor.

### 3.1.4 Indoor Drilling and Excavation

The work scope may require indoor excavation where there may not be adequate ventilation sufficient to safely operate any rig or excavation equipment powered by an internal combustion engine. Where possible, all such work should be done with equipment powered by electricity. If such equipment is used and must be directly connected to the building's electrical system or to an independent system, this work must be completed by a licensed electrician in accordance with all electrical codes applicable to the work.

Indoor work which is to be completed with equipment powered by an internal combustion engine must incorporate air monitoring for carbon monoxide (CO) using calibrated air monitoring equipment (MultiRAE or equivalent). In addition, the work plan should incorporate mitigation for venting engine exhaust fumes directly to the outdoors and for circulating fresh air into the work area.

The OSHA Time Weighted Average (TWA) Permissible Exposure Limit (PEL) for CO from 50 to 35 parts per million (ppm). Langan will monitor CO with a suitable monitoring device. If CO levels exceed 5 ppm, Langan will instruct contractors to begin mitigation measures. These measures are at a minimum:

- Increase air circulation using industrial size fans to bring additional fresh air into the building or vent exhaust to the outside.
- Modify the passive exhaust method being used to increase venting circulation by using wider diameter tubing or sealing tubing connections; or
- Modify the work schedule where the rig is turned off to allow time for CO levels to fall back to background.

All work must cease if CO levels reach 35 ppm. The Langan engineer is to report to the PM and H&S officer when an action level is reached.

### 1.3.5 Investigation and Sampling

Sampling groundwater requires the donning of chemical resistant gloves in addition to the standard PPE and cut resistant gloves when cutting sampling-tubing to length. Langan personnel are not to operate drilling equipment nor assemble or install monitoring well equipment. These tasks are to be completed by the driller contractor.

### 1.3.6 Groundwater/Product Gauging

Gauging products require additional safety considerations including the presence of VOCs and protection of both field cloths and property. Langan will monitor air for VOCs using a duly calibrated PID. Langan will wear protective clothing including Tyvek® over-cloths, as necessary. To protect property, Langan will set a plastic barrier to protect floors or protect landscape and use absorbent pads as necessary to collect pooled separate phase liquid. If sampling for PFAS from the same well, Langan will complete the product check first, if the well can be sampled without including product, Langan will remove the Tyvek® material from the well head vicinity.

### 3.1.7 Product Recovery Well Bailing

Langan may bail separate phase liquid from monitoring wells. Langan will wear Tyvek™ suits, Tyvek™ boots and chemical resistant gloves in addition to the standard PPE for bailing and cut resistant gloves when cutting sampling-tubing to length. In addition, Langan will place plastic sheeting around the recovery well head to control spillage during product recovery. Langan will also keep on hand and readily available absorbing pads to use as needed.

### 3.1.8 Electrical Pumps

Langan may use an electric pump to collect separate phase liquid from the recovery wells or to sample groundwater. Langan will inspect the electric pump and control box prior to use and specifically note the condition of the electrical connectors, pump, control box and the electrical cord. The electrical connection must be grounded and connected to the power source using a functional three prong grounded plug. The power source must be a Ground Fault Circuit Interrupter (GFI or GFCI) receptacle.

### 3.1.9 Vapor Investigation and Sampling

Sampling vapor requires the donning of work gloves in addition to the standard PPE when assembling the Summa™ canister with the regulator and cut resistant gloves when cutting sampling- or silicone-tubing to length. Langan personnel are not to operate contractor equipment nor assemble or install the contractor vapor point sampling equipment unless instructed by the work plan. When not instructed by the work plan, these tasks are to be completed by the contractor.

### 3.1.10 Additional Vapor Screening

Langan personnel may prescreen vapor samples for volatile organic compounds (VOCs), methane, hydrogen sulfide and lower explosion limit (LEL) conditions using duly calibrated devices design to screen vapor for these parameters. Langan personnel may also perform atmospheric screening for LEL. Results of the screening may be used in determining which soil vapor samples will be submitted for analysis.

Work activities will immediately cease, and the work area is to be evacuated if the MultiRAE returns a reading of 10% of the LEL (an alarm will sound). Langan personnel will contact the

### 3.1.11 Plugging and Abandonment of Observation/Monitoring Wells

Langan personnel are not to operate equipment nor assist in the plugging and abandonment of the observation/monitoring wells. These tasks are to be completed by the contractor.

### 3.1.12 Drum Sampling

Drilling fluid, rinse water, grossly contaminated soil samples, and cuttings will be containerized in 55-gallon drums for disposal off-site. Each drum must be labeled in accordance with the Langan Drum Labeling Standard Operating Procedure (SOP09). Sampling drums requires the donning of work gloves when opening the drums and chemical resistant gloves when sampling in addition

to standard PPE.

### 3.2 Radiation Hazards

No radiation hazards are known or expected at the site.

### 3.3 Physical Hazards

Physical hazards, which may be encountered during site operations for this project, are detailed in Table 1.

#### 3.3.1 Explosion

No explosion hazards are expected for the scope of work at this site.

#### 3.3.2 Heat Stress

The use of Level C protective equipment, or greater, may create heat stress. Monitoring of personnel wearing personal protective clothing should commence when the ambient temperature is 72$^{O}$F or above. Table 6 presents the suggested frequency for such monitoring. Monitoring frequency should increase as ambient temperature increases or as slow recovery rates are observed. Refer to Table 7 to assist in assessing when the risk for heat-related illness is likely. To use this table, the ambient temperature and relative humidity must be obtained (a regional weather report should suffice). Heat stress monitoring should be performed by the HSO or the FTL, who must be able to recognize symptoms related to heat stress.

To monitor the workers, be familiar with the following heat-related disorders and their symptoms:

- **Heat Cramps: Painful** spasms of arm, leg, or abdominal muscles, during or after work
- **Heat Exhaustion: Headache**, nausea, dizziness; cool, clammy, moist skin; heavy sweating; weak, fast pulse; shallow respiration, normal temperature
- **Heat Stroke**: Headache, nausea, weakness, hot dry skin, fever, rapid strong pulse, rapid deep respirations, loss of consciousness, convulsions, coma. *This is a life-threatening condition***.**

Do not permit a worker to wear a semi-permeable or impermeable garment when they are showing signs or symptoms of heat-related illness.

To monitor the worker, measure:

- **Heart rate: Count** the radial pulse during a 30-second period as early as possible in the rest period. If the heart rate exceeds 100 beats per minute at the beginning of the rest

period, shorten the next work cycle by one-third and keep the rest period the same. If the heart rate still exceeds 100 beats per minute at the next rest period, shorten the following work cycle by one-third. A worker cannot return to work after a rest period until their heart rate is below 100 beats per minute.

- **Oral temperature: Use** a clinical thermometer (3 minutes under the tongue) or a similar device to measure the oral temperature at the end of the work period (before drinking). If oral temperature exceeds 99.6$^{O}$F (37.6$^{O}$C), shorten the next work cycle by one-third without changing the rest period. A worker cannot return to work after a rest period until their oral temperature is below 99.6$^{O}$F. If oral temperature still exceeds 99.6$^{O}$F (37.6$^{O}$C) at the beginning of the next rest period, shorten the following cycle by one-third. Do <u>not</u> permit a worker to wear a semi-permeable or impermeable garment when oral temperature exceeds 100.6$^{O}$F (38.1$^{O}$C).

<u>Prevention</u> <u>of</u> <u>Heat</u> <u>Stress</u> - Proper training and preventative measures will aid in averting loss of worker productivity and serious illness. Heat stress prevention is particularly important because once a person suffers from heat stroke or heat exhaustion, that person may be predisposed to additional heat-related illnesses. To avoid heat-stress the following steps should be taken:

- Adjust work schedules.
- Mandate work slowdowns as needed.
- Perform work during cooler hours of the day if possible or at night if adequate lighting can be provided.
- Provide shelter (air-conditioned, if possible) or shaded areas to protect personnel during rest periods.
- Maintain worker's body fluids at normal levels. This is necessary to ensure that the cardiovascular system functions adequately. Daily fluid intake must equal the amount of water lost in sweat, i.e., eight fluid ounces (0.23 liters) of water must be ingested for every eight ounces (0.23 kilograms [kg]) of weight loss. The normal thirst mechanism is not sensitive enough to ensure that enough water will be drunk to replace lost sweat. When heavy sweating occurs, encourage the worker to drink more. The following strategies may be useful:
    - Maintain water temperature 50$^{O}$ to 60$^{O}$F (10$^{O}$ to 16.6$^{O}$C).
    - Provide small disposal cups that hold about four ounces (0.1 liters).
    - Have workers drink 16 ounces (0.5 liters) of fluid (preferably water or dilute drinks) before beginning work.
    - Urge workers to drink a cup or two every 15 to 20 minutes, or at each monitoring break. A total of 1 to 1.6 gallons (4 to 6 liters) of fluid per day are recommended, but more may be necessary to maintain body weight.
    - Train workers to recognize the symptoms of heat-related illness.

### 3.3.3 Cold-Related Illness

If work on this project begins in the winter months, thermal injury due to cold exposure can become a problem for field personnel. Systemic cold exposure is referred to as hypothermia. Local cold exposure is called frostbite.

- **Hypothermia -** Hypothermia is defined as a decrease in the patient's core temperature below 96$^{O}$F. The body temperature is normally maintained by a combination of central (brain and spinal cord) and peripheral (skin and muscle) activity. Interference with any of these mechanisms can result in hypothermia, even in the absence of what normally is considered a "cold" ambient temperature. Symptoms of hypothermia include shivering, apathy, listlessness, sleepiness, and unconsciousness.
- **Frostbite -** Frostbite is both a general and medical term given to areas of local cold injury. Unlike systemic hypothermia, frostbite rarely occurs unless the ambient temperatures are less than freezing and usually less than 20$^{O}$F. Symptoms of frostbite are sudden blanching or whitening of the skin; the skin has a waxy or white appearance and is firm to the touch; tissues are cold, pale, and solid.

Prevention of Cold-Related Illness - To prevent cold-related illness:

- Educate workers to recognize the symptoms of frostbite and hypothermia.
- Identify and limit known risk factors:
- Assure the availability of an enclosed, heated environment on or adjacent to the site.
- Assure the availability of dry changes of clothing.
- Assure the availability of warm drinks.
- Start (oral) temperature recording at the job site:
- At the FSO or Field Team Leader's discretion when suspicion is based on changes in a worker's performance or mental status.
- At a worker's request.
- As a screening measure, two times per shift, under unusually hazardous conditions (e.g., wind chill less than 20$^{O}$F, or wind-chill less than 30$^{O}$F with precipitation).
- As a screening measure whenever anyone worker on the site develops hypothermia.

Any person developing moderate hypothermia (a core temperature of 92$^{O}$F) cannot return to work for 48 hours.

### 3.3.4 Noise

Work during the proposed activities may be conducted at locations with high noise levels from the operation of equipment. Hearing protection will be used, as necessary.

### 3.3.5 Hand and Power Tools

The use of hand and power tools can present a variety of hazards, including physical harm from being struck by flying objects, being cut, or struck by the tool, fire, and electrocution. All hand and power tools should be inspected for health and safety hazards prior to use. If deemed unserviceable/un-operable, notify the supervisor and tag and remove equipment out of service. Ground Fault Circuit Interrupters (GFCIs) are required for all power tools requiring direct electrical service.

### 3.3.6 Slips, Trips, and Fall Hazards

Care should be exercised when walking at the site, especially when carrying equipment. The presence of surface debris, uneven surfaces, pits, facility equipment, and soil piles contribute to tripping hazards and fall hazards. To the extent possible, all hazards should be identified and marked on the site, with hazards communicated to all workers in the area.

### 3.3.7 Utilities (Electrocution and Fire Hazards)

*3.3.7.1 Utility Clearance*

The possibility of encountering underground utilities poses fire, explosion, and electrocution hazards. All excavation work will be preceded by a review of available utility drawings and by notification of the subsurface work to N.Y. One –Call--Center.

*3.3.7.2 Lockout-Tagout*

The potential adverse effects of electrical hazards include burns, arc flashes, and electrocution, which could result in serious injury including death. Therefore, there is a procedure that establishes the requirements for the lockout/tag out (LOTO) of energy isolating devices in accordance with the OSHA electrical lockout and tagging requirements as specified in 29CFR1910.147 and 29 CFR 1926.417. This procedure will be used to ensure that all machines and equipment are isolated from potentially hazardous energy. If possible, equipment that could cause injury due to unexpected energizing, start-up, or release of stored energy will be locked/tagged, before field personnel performs work activities.

The facility owner/operator/representative is to be the authorized person that will initiate and perform the LOTO in accordance with applicable rules and practices. Inerting of electrical power sources is to be completed by an authorized and licensed electrician. Langan personnel will follow LOTO protocols and practices including adding a separate lock/signature to the LOTO chain in accordance with said protocols and practices.

**SPECIAL NOTE: Project** personnel will assume that all electrical equipment at the surface, subsurface, and overhead locations are energized until equipment has been designated and

confirmed as de-energized by a utility company representative. Langan will notify the designated utility representative prior to working adjacent to this equipment and will verify that the equipment is energized or de-energized in the vicinity of the work location. No project work shall be performed by Langan personnel or subcontractors near energized electrical lines or equipment.

The FTL shall accompany the designated facility owner/operator/representative or authorized/licensed electrician in surveying to locate and identify all energy-isolating devices. Langan will note which switches, valves or other isolating devices are used for inerting the equipment and how they are set assuring LOTO. The lockout/tagout procedure involves, but is not limited to, electricity, motors, steam, natural gas, compressed air, hydraulic systems, digesters, sewers, etc.

### 3.3.8 Adequate Lighting

Indoor or night activities must be done under adequate lighting conditions. The Langan field engineer must be able to clearly see the equipment, all controls and have sufficient lighting to detail color labels. Battery operated lights are sufficient provided they cast a wide enough field to provide the required lighting and there are back-up batteries and emergency flashlights available. Electrically powered lights are suitable provided the electrical source is equipped with a ground fault interrupt circuit (GFIC) and the extensions cords are visually inspected prior to each use, and not used if they show cracked, damaged, or missing insulation. If a generator is supplying the electricity, it must be located outdoors and properly grounded and vented.

### 3.3.9 Physical Hazard Considerations for Material Handling

There are moderate to severe risks associated with moving heavy objects at the Site. The best method of reducing back injuries is to reduce or eliminate manual lifting. Mechanical lifting devices should be used whenever possible.

- Size up the load before attempting to lift it. Heavy objects will be lifted and moved by mechanical devices rather than manual effort whenever possible. Never overexert when lifting.
    - When using a mechanical device, the devices should be appropriate for the lifting of moving tasks and operated only by trained and authorized personnel.
    - Objects that require special handling or rigging will only be moved under the guidance of a person who has been specifically trained to move such objects.
    - Lifting devices will be inspected, certified, and labeled to confirm their weight capacities. Defective equipment will be taken out of service immediately and repaired or destroyed.
    - The wheels of any truck being loaded or unloaded will be choked to prevent movement. Outriggers will be fully extended to a flat, firm surface during

operation.
    - Personnel will not pass under a raised load, nor will a suspended load be left unattended.
    - Personnel will not be carried on lifting equipment unless it is specifically designed to carry passengers.
    - All reciprocating, rotating, or other moving parts will be always guarded.
    - Accessible fire extinguishers, currently (monthly) inspected, will be available in all mechanical lifting devices.
    - Verify all loads/materials are secure before transportation
- If manual lifting cannot be avoided the following lifting procedures are recommended.
    - If the load is thought to be more than one person can handle, get another person to help with the job.
    - Make sure you can carry the load where you need to go before attempting to lift it. Make sure your path is clear of equipment, materials, debris, holes, etc.
    - Place your feet close to the object, spread about 12 inches apart.
    - Bend your knees and get a good hand hold.
    - Lift straight up smoothly, allowing your legs not your back to do the work.
    - Keep the load close to the body with your elbows and arms tucked in.
    - Do not twist or turn your body once you have made the lift.
    - Set the load down properly:
        - Lower the load slowly by bending at your knees, letting your legs do most of the work.
        - Don't let go of the load until it's secure on the surface.

Material handling tasks that are unusual or require specific guidance will need a written addendum to this HASP. The addendum must identify the lifting protocols before the tasks are performed. Upon approval, the plan must be reviewed with all affected employees and documented. Any deviation from a written plan will require approval by the Langan HSM.

### 3.3.10 Hearing Conservation

Under the construction industry standard, the maximum permissible occupational noise exposure is 90 A-weighted decibels (dbA) (8-hour TWA), and noise levels more than 90 dbA must be reduced through feasible administrative and engineering controls (20 CFR 1926.52). Hearing protection is required when working within 15 feet of vacuum extraction equipment and drill rigs.

### 3.3.11 Open Water

Employees working over or near water, where the danger of drowning exists, must be provided with U.S. Coast Guard-approved life jackets or buoyant work vests. Prior to and after each use, the buoyant work vests or life preservers must be inspected for defects that would alter their strength or buoyancy. Defective units must not be used.

And should a worker fall into the water, OSHA requires (29 CFR 1926.106(c)) that ring-buoys with at least 90 feet of the line must be provided and ready for emergency rescue operations. The

distance between ring buoys must not exceed 200 feet. Another remedial action required by OSHA (29 CFR 1926.106(d)) is the use of lifesaving skiffs.

OSHA requires that at least one lifesaving skiff must be immediately available at locations where employees are working over or adjacent to water and must include the following provisions.

- The skiff must be in the water or capable of being quickly launched by one person.
- At least one person must be present and specifically designated to respond to water emergencies and always operate the skiff when there are employees above water.
- When the operator is on break another operator must be designated to provide requisite coverage when there are employees above water.
- The designated operator must either have the skiff always staffed or have someone remain in the immediate area such that the operator can quickly reach the skiff and perform rescue services.
- The skiff operator may be assigned other tasks provided the tasks do not interfere with the operator's ability to quickly reach the skiff.
- A communication system, such as a walkie-talkie, must be used to inform the skiff operator of an emergency and to inform the skiff operator where the skiff is needed.
- The skiff must be equipped with both a motor and oars.

Regarding the number of skiffs required and the appropriate maximum response time, the following factors must be evaluated:

- The number of work locations where there is a danger of falling into water.
- The distance to each of those locations.
- Water temperature and currents.
- Other hazards such as, but not limited to, rapids, dams, and water intakes.

Other regulations that present H&S practices and PPE for work on or near water include: 29 CFR 1910, Subpart T (401 – 440).

## 3.4 Biological Hazards

### 3.4.1 Animals

There is a possibility of encountering wildlife including reptiles, rodents, and other small and medium-sized mammals. Langan personnel are to avoid interacting with any wildlife.

### 3.4.2 Insects

Ticks and other biting or stinging insects may be encountered during site operations. Langan

personnel should take necessary precautions including wearing long sleeve shirts and insecticide to prevent bites and stings. After fieldwork, Langan personnel should perform a complete visual inspection of their clothing to ensure they are not inadvertently harboring ticks. If they do observe a tick bite, they are to contact the HSM or HSO and report the event.

### 3.4.3 Plants

Poisonous plants may be encountered during site operations. Langan personnel should take necessary precautions including donning long sleeve shirts and applying preventative poison Ivy/Sumac lotion to prevent or limit the effects of exposure. If after fieldwork, Langan employees do observe a reaction to poisonous plant exposure, they are to contact the HSM or HSO and report the event.

### 3.4.4 Mold

This section is restricted to subsurface investigations where sampling soil, groundwater, soil or sub-slab vapor or ambient air in an indoor environment with slight to moderate mold impact. Mold exposure symptoms include nasal stuffiness, eye irritation, or wheezing.

The Langan field engineer is required to don a ½ face respirator with a minimum p-100 particulate filter and Tyvek™ type overclothing before entering mold impacted indoor work area. The Langan field engineer must be medically cleared and have been properly fitted for a respirator before donning one.

## 3.5 Additional Safety Analysis

### 3.5.1 Presence of Non-Aqueous Phase Liquids (NAPL)

Special care and PPE should be considered when NAPL is observed as NAPL is a typically flammable fluid and releases VOCs known to be toxic and/or carcinogenic. If NAPL is present in a monitoring well, vapors from the well casing may contaminate the work area breathing zone with concentrations of VOCs potentially exceeding health and safety action levels. In addition, all equipment used to monitor or sample NAPL (or ground water from wells containing NAPL) must be intrinsically safe. Equipment that directly contacts NAPL must also be resistant to organic solvents.

At a minimum, a PID should be used to monitor VOCs when NAPL is observed. If NAPL is expected to be observed in an excavation or enclosed area, air monitoring must be started using calibrated air monitoring equipment designed to sound an audio alarm when atmospheric concentrations of VOC are within 10% of the LEL. In normal atmospheric oxygen concentrations, the LEL monitoring may be done with a Wheatstone bridge/catalytic bead type sensor (i.e.,

MultiRAE). However, in oxygen-depleted atmospheres (confined space), only an LEL designed to work in low-oxygen environments may be used. Best practices require that the LEL monitoring unit be equipped with a long sniffer tube to allow the LEL unit to remain outside the UST excavation.

When NAPL is present, Langan personnel are required to always use disposable nitrile gloves to prevent skin contact with contaminated materials. They should also consider having available respirators and protective clothing (Tyvek® overalls), especially if NAPL is in abundance and there are high concentrations of VOCs.

All contaminated disposables including PPE and sampling equipment must be properly disposed of in labeled 55-gallon drums.

### 3.6 Job Safety Analysis

A Job Safety Analysis (JSA) is a process to identify existing and potential hazards associated with each job or task so these hazards can be eliminated, controlled, or minimized. A JSA will be performed at the beginning of each workday, and additionally whenever an employee begins a new task or moves to a new location. All JSAs must be developed and reviewed by all parties involved. A blank JSA form and documentation of completed JSAs are in Attachment G.

## 4.0 PERSONNEL TRAINING

### 4.1 Basic Training

Completion of an initial 40-hour HAZWOPER training program as detailed in OSHA's 29 CFR 1910.120(e) is required for all employees working on a site engaged in hazardous substance removal or other activities which expose or potentially expose workers to hazardous substances, health hazards, or safety hazards as defined by 29 CFR 1910.120(a). Annual 8-hour refresher training is also required to maintain competencies to ensure a safe work environment. In addition to these training requirements, all employees must complete the OSHA 10-hour Construction Safety and Health training, and supervisory personnel must also receive eight additional hours of specialized management training. Training records are maintained by the HSM.

### 4.2 Initial Site-Specific Training

Training will be provided to specifically address the activities, procedures, monitoring, and equipment for site operations at the beginning of each field mobilization and the beginning of each discrete phase of work. The training will include the site and facility layout, hazards, and emergency services at the site, and will detail all the provisions contained within this HASP. For a HAZWOPER operation, training on the site must be for a minimum of 3 days. Specific issues that will be addressed include the hazards described in Section 3.0.

### 4.3 Tailgate Safety Briefings

Before starting work each day or as needed, the Langan HSO will conduct a brief tailgate safety meeting to assist site personnel in conducting their activities safely. Tailgate meetings will be documented in Attachment H. Briefings will include at a minimum the following:

- Work plan for the day.
- Review of safety information relevant to planned tasks and environmental conditions.
- New activities/tasks being conducted.
- Driving conditions/hazards/designated parking areas.
- Results of Jobsite Safety Inspection Checklist.
- Changes in work practices.
- Safe work practices; and
- Discussion and remedies for noted or observed deficiencies.

## 5.0 MEDICAL SURVEILLANCE

All personnel who will be performing fieldwork involving potential exposure to toxic and hazardous substances (defined by 29 CFR 1910.120(a)) will be required to have passed an initial baseline medical examination, with follow-up medical exams thereafter, consistent with 29 CFR 1910.120(f). Medical evaluations will be performed by, or under the direction of, a physician certified in occupational medicine.

Additionally, personnel who may be required to perform work while wearing a respirator must receive medical clearance as required under CFR 1910.134(e), *Respiratory Protection*. Medical evaluations will be performed by, or under the direction of, a physician certified in occupational medicine. Results of medical evaluations are maintained by the HSM.

### 5.1 Mercury Monitoring

Langan includes medical monitoring for mercury during the initial baseline and annual physical.

### 5.2 Coronavirus

**General Preventative Measures**

Field personnel must follow general proper hygiene measures while in the field including:

- Avoid touching eyes, nose, and mouth.
- Cover your mouth when you are about to cough or sneeze with tissue and throw in the trash.

- Wash hands often with soap and water for 20 seconds after going to the bathroom, before eating, after blowing nose, coughing, or sneezing.
- Use hand sanitizer with at least 60% alcohol if soap and water are not available.
- Avoid physical contact with other people (e.g., no handshakes).
- Maintain a safe distance of at least six feet from other people (social distancing).
- Wear face coverings when around other workers to minimize the spread of COVID-19. (May be required in certain states or locations.)

**Construction Trailers**

Employees should avoid the use of shared construction trailers or where employees cannot maintain a safe distance (minimum 6 feet) from other workers. If trailer use is needed, areas such as desks, phones, chairs, and other common areas, should be cleaned and disinfected before and after use. Protocols should be developed to minimize trailer use to essential personnel, restrict use from any workers who are ill or showing symptoms of being ill, use face coverings and ensure a safe distance of six feet can be established between workers.

**Communication**

Include Coronavirus topics and prevention topics in daily tailgate meetings to ensure Coronavirus awareness is communicated daily. Discussions can focus on general topics including social distancing, prevention measures for field personnel, signs and symptoms, and recent news on the Coronavirus. Site-specific topics should include minimizing face-to-face contact, disinfecting/sterilizing field equipment, use of PPE to reduce exposure, site security, use of face coverings, and other potential exposure issues/concerns.

**Sick/Ill Workers**

No Langan employee is permitted to be onsite when ill and/or showing potential symptoms of the Coronavirus. Symptoms of the Coronavirus may appear 2-14 days after exposure and can range from mild to severe. The most common symptoms include fever, fatigue, dry cough, shortness of breath chills, repeated shaking with chills, muscle pain, headache, sore throat, or new loss of taste or smell. If an employee or subcontractor is observed being ill or exhibiting symptoms of Coronavirus, employees must immediately utilize their Stop Work Authority and contact their project manager to address the situation. If an employee observes another worker onsite exhibiting symptoms of Coronavirus, immediately utilize Stop Work Authority, notify their project manager, and site manager or safety officer. Work should resume when the safety and health of Langan and subcontractors is adequately addressed.

# 6.0 PERSONAL PROTECTIVE EQUIPMENT

## 6.1 Levels of Protection

Langan will provide PPE to Langan employees to protect them from the specific hazards they are likely to encounter onsite. Directly hired contractors will provide their employees with equivalent PPE to protect them from the specific hazards likely to be encountered on-site. Selection of the appropriate PPE must take into consideration: (1) identification of the hazards or suspected hazards; (2) potential exposure routes; and (3) the performance of the PPE construction (materials and seams) in providing a barrier to these hazards.

Human exposure to contaminants found in the subsurface can occur through three primary routes:

- Inhalation of gases, vapors, dust, or mist is a common route of exposure. Chemicals can enter and irritate the airways and the lungs. They can become deposited in the airways or can be absorbed through the lungs into the bloodstream.
- Direct contact of contaminants with the skin or eyes is a common route of exposure. Some substances are absorbed through the skin and can enter the bloodstream. Broken, cut, or cracked skin will allow substances to enter the body more easily.
- Ingestion or swallowing of food, drink, or other substances is the third route of exposure. Chemicals that get in or on food, utensils, or hands can be ingested. Substances can be absorbed into the blood.

Based on anticipated site conditions and the proposed work activities to be performed at the site, Level D protection will be used. The upgrading/downgrading of the level of protection will be based on continuous air monitoring results as described in Section 6.0 (when applicable). The decision to modify standard PPE will be made by the site HSO or FTL after conferring with the PM. The levels of protection are described below.

**Level D Protection (as needed)**

- Safety glasses with side shields or chemical splash goggles
- Safety boots/shoes
- Coveralls (Tyvek® or equivalent)
- Hard hat
- Long sleeve work shirt and work pants
- Nitrile gloves
- Hearing protection
- Reflective safety vest

**Level D Protection (Modified, as needed)**

- Safety glasses with side shields or chemical splash goggles
- Safety boots/shoes (toe-protected)
- Disposable chemical-resistant boot covers.
- Coveralls (poly-coated Tyvek or equivalent to be worn when contact with wet contaminated soil, groundwater, or non-aqueous phase liquids is anticipated)
- Hard hat
- Long sleeve work shirt and work pants
- Nitrile gloves
- Hearing protection (as needed)
- Personal floatation device (for work within 5 ft of the water)
- Reflective traffic vest

**Level C Protection (as needed)**

- Full or Half face, air-purifying respirator, with NIOSH approved High-Efficiency Particulate Air (HEPA) filter.
- Inner (latex) and outer (nitrile) chemical-resistant gloves
- Safety glasses with side shields or chemical splash goggles
- Chemical-resistant safety boots/shoes
- Hard hat
- Long sleeve work shirt and work pants
- Coveralls (Tyvek® or equivalent)
- Hearing protection (as needed)
- Reflective safety vest

The action levels used in determining the necessary levels of respiratory protection and upgrading to Level C are summarized in Table 4. The written Respiratory Protection Program is maintained by HSM and is available if needed. The monitoring procedures and equipment are outlined in Section 6.0 (when applicable).

## 6.2 Respirator Fit-Test.

All Langan employees who may be exposed to hazardous substances at the work site must be in possession of a full or half face air-purifying respirator and have been successfully fitted within the past year. Fit-test records are maintained by the HSM.

### 6.3 Respirator Cartridge Change-Out Schedule

Respiratory protection is required to be worn when certain action levels (Table 2) are reached. A respirator cartridge change-out schedule has been developed to comply with 29 CFR 1910.134. The respirator cartridge change-out schedule for this project is as follows:

- Cartridges must be removed and disposed of at the end of each shift when cartridges become wet or the wearer experiences a breakthrough, whichever occurs first.
- If the humidity exceeds 85%, then cartridges must be removed and disposed of after 4 hours of use.

Respirators must not be stored at the end of the shift with contaminated cartridges left on. Cartridges must not be worn on the second day, no matter how short the time period was the previous day they were used.

## 7.0 AIR QUALITY MONITORING AND ACTIONS LEVELS

### 7.1 Monitoring During Site Operations

Atmospheric air monitoring results may be collected and used to provide data to determine when exclusion zones need to be established and when certain levels of personal protective equipment are required. For all instruments, there are Site-specific action-level criteria that are used in making field health and safety determinations. Other data, such as the visible presence of contamination or the steady state nature of air contaminant concentration, are also used in making field health and safety decisions. Therefore, the HSO may establish an exclusion zone or require a person to wear a respirator even though atmospheric air contaminant concentrations are below established HASP action levels.

During site work involving disturbance of petroleum-impacted or fill material, real-time air monitoring may be conducted for methane and VOCs. A MultiRAE LEL/Oxygen (O2) meter and FID will be used to monitor the LEL of methane, and a PID and/or FID will be used to monitor concentrations of VOCs at personnel breathing-zone height. Air monitoring will be the responsibility of the HSO or appointed substitute. Air monitoring may be conducted during intrusive activities associated with the completion of excavation, debris removal, and soil grading. All manufacturers' instructions for instrumentation and calibration will be available onsite.

Subcontractors' air monitoring plans must be equal to or more stringent than the Langan plan.

An air monitoring calibration log is provided in Attachment D of this HASP.

### 7.1.1 Volatile Organic Compounds

Monitoring with a PID, such as a MiniRAE 2000 (10.6v) or equivalent may occur during intrusive work in the Areas of Concern (AOCs). Colorimetric Indicator Tubes for benzene may be used as a backup for the PID if measurements remain above background monitor every 2 hours. The HSO will monitor the employee's breathing zone at least every 30 minutes, or whenever there is any indication that concentrations may have changed (odors, visible gases, etc.) since the last measurement. If VOC levels are observed above 5 ppm for longer than 5 minutes or if the site PPE is upgraded to Level C, the HSO will begin monitoring the site perimeter at a location downwind of the AOC every 30 minutes in addition to the employee breathing zone. Instrument action levels for monitored gases are provided in Table 4.

### 7.1.2 Metals

Based upon the site historic fill, there is a potential for the soils to contain Polycyclic Aromatic Hydrocarbons (PAHs) and metals. During invasive procedures which have the potential for creating airborne dust, such as excavation of dry soils, a real-time airborne dust monitor such as a Mini-Ram may be used to monitor for air particulates. The HSO will monitor the employee's breathing zone at least every 30 minutes, or whenever there is any indication that concentrations may have changed (appearance of visible dust) since the last measurement. If dust levels are observed to be greater than 0.100 milligrams per cubic meter ($mg/m^3$) or visible dust is observed for longer than 15 minutes or if the site PPE is upgraded to Level C, the HSO will begin monitoring the site perimeter at a location downwind of the AOC every 30 minutes in addition to the employee breathing zone. Instrument action levels for dust monitoring are provided in Table 4.

### 7.1.3 Methane

During soil excavation or other intrusive activities, direct reading air monitoring may be performed in the excavation area to determine exposure to workers. Monitoring an LEL/O2 meter and FID may occur during intrusive work in the AOCs. The HSO will monitor the employees' breathing zone at least hourly during intrusive activities. If LEL levels are observed above 20% the professional engineer (PE) or their designee will stop work and evacuate the area; warn others; and determine source of readings and take corrective actions. The Contractor will be responsible for mitigating explosive gas levels.

## 7.2 Monitoring Equipment Calibration and Maintenance

Instrument calibration must be documented and included in a dedicated safety and health logbook or on separate calibration pages of the field book. All instruments must be calibrated before and after each shift. Calibration checks may be used during the day to confirm instrument accuracy. Duplicate readings may be taken to confirm individual instrument responses.

All instruments must be operated in accordance with the manufacturers' specifications. Manufacturers' literature, including an operation manual for each piece of monitoring equipment, will be maintained on-site by the HSO for reference.

### 7.3 Determination of Background Levels

Background (BKD) levels for VOCs, dust and methane will be established prior to intrusive activities within the AOC at an upwind location. A notation of BKD levels will be referenced in the daily monitoring log. BKD levels are a function of prevailing conditions. BKD levels will be taken in an appropriate upwind location as determined by the HSO.

Table 4 lists the instrument action levels.

## 8.0 COMMUNITY AIR MONITORING PROGRAM

Community air monitoring may be conducted in compliance with local standards. If conducted, Langan will implement the generic CAMP outlined below amended to comply with local conditions or standards:

Monitoring for dust and odors will be conducted during all ground intrusive activities by the FTL. Continuous monitoring of the perimeter of the work zones for odor, VOCs, and dust may be required for all ground intrusive activities such as soil excavation and handling activities. The work zone is defined as the general area in which machinery is operating in support of remediation activities. A portable PID will be used to monitor the work zone and for periodic monitoring for VOCs during activities such as soil and groundwater sampling and soil excavation. The site perimeter will be monitored for fugitive dust emissions by visual observations as well as instrumentation measurements (if required). When required, particulate or dust will be monitored continuously with real-time field instrumentation that will meet, at a minimum, the local standards or, default to the performance standards below:

If VOC monitoring is required, the following actions will be taken based on VOC levels measured:

- If total VOC levels exceed 5 ppm above background for the 15-minute average at the perimeter, work activities will be temporarily halted and monitoring continued. If levels readily decrease (per instantaneous readings) below 5 ppm above background, work activities will resume with continued monitoring.
- If total VOC levels at the downwind perimeter of the hot zone persist at levels more than 5 ppm above background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps work activities will resume provided that the total organic vapor level is 200 feet downwind of the hot zone or half the distance to the nearest

potential receptor or residential/commercial structure, whichever is less – but in no case less than 20 feet, is below 5 ppm above background for the 15-minute average.
- If the total VOC level is above 25 ppm at the perimeter of the hot zone, activities will be shut down.

If dust monitoring with field instrumentation is required, the following actions will be taken based on instrumentation measurements:

- If the downwind particulate level is 100 micrograms per cubic meter (µg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression must be employed. Work may continue with dust suppression techniques provided that downwind particulate matter less than 10 microns (PM10) levels do not exceed 150 µg/m³ above the background level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM10 levels are greater than 150 µg/m³ above the background level, work must be stopped, and a re-evaluation of activities initiated. Work can resume if dust suppression measures and other controls are successful in reducing the downwind PM10 concentration to within 150 µg/m³ of the upwind level and in preventing visible dust migration.

## 8.1 Dust Suppression Techniques

Preventative measures for dust generation may include wetting site fill and soil, construction of an engineered construction entrance with a gravel pad, a truck wash area, covering soils with tarps, and limiting vehicle speeds to five miles per hour.

Work practices to minimize odors and vapors include limiting the time that the excavations remain open, minimizing stockpiling of contaminated-source soil, and minimizing the handling of contaminated material. Offending odor and organic vapor controls may include the application of foam suppressants or tarps over the odor or VOC source areas. Foam suppressants may include biodegradable foams applied over the source material for short-term control of the odor and VOCs.

If odors develop and cannot be otherwise controlled, additional means to eliminate odor nuisances will include direct load-out of soils to trucks for off-site disposal; use of chemical odorants in spray or misting systems; and use of staff to monitor odors in surrounding neighborhoods.

Where odor nuisances have developed during remedial work and cannot be corrected, or where the release of nuisance odors cannot otherwise be avoided due to on-site conditions or proximity

to sensitive receptors, odor control will be achieved by sheltering excavation and handling areas under tented containment structures equipped with appropriate air venting/filtering systems.

## 9.0 WORK ZONES AND DECONTAMINATION

### 9.1 Site Control

Work zones are intended to control the potential spread of contamination throughout the site and to ensure that only authorized individuals are permitted into potentially hazardous areas. Specific zones will be established on the work site by the Contractor when operations begin for each task requiring such delineation. Maps depicting the zones will be available at the Site.

Any person working in an area where the potential for exposure to site contaminants exists will only be allowed access after providing the HSO with proper training and medical documentation.

**Exclusion Zone (EZ)** - All activities which may involve exposure to site contaminants, hazardous materials, and/or conditions should be considered an EZ. Decontamination of field equipment will also be conducted in the Contaminant Reduction Zone (CRZ) which will be located on the perimeter of the EZ. The EZ and the CRZ will be delineated by cones, tapes, or other means. The HSO may establish more than one EZ where different levels of protection may be employed, or different hazards exist. The size of the EZ must be determined by the HSO allowing adequate space for the activity to be completed, field members, and emergency equipment.

### 9.2 Contamination Zone

#### 9.2.1 Personnel Decontamination Station

Personal hygiene, coupled with diligent decontamination, will significantly reduce the potential for exposure.

#### 9.2.2 Minimization of Contact with Contaminants

During the completion of all site activities, personnel should attempt to minimize the chance of contact with contaminated materials. This involves a conscientious effort to keep "clean" during site activities. All personnel should minimize kneeling, splash generation, and another physical contact with contamination as PPE is intended to minimize accidental contact. This may minimize the degree of decontamination required and the generation of waste materials from site operations.

Field procedures will be developed to control spray and runoff and to ensure that unprotected personnel working nearby are not affected.

### 9.2.3 Personnel Decontamination Sequence

Decontamination may be performed by removing all PPE used in EZ and placing it in drums/trash cans at the CRZ. Baby wipes should be available for wiping hands and face. Drums/trash cans will be labeled by the field crews in accordance with all local, state, and federal requirements. Management plans for contaminated PPE, and tools are provided below.

### 9.2.4 Emergency Decontamination

If circumstances dictate that contaminated clothing cannot be readily removed, then remove gross contamination and wrap injured personnel with clean garments/blankets to avoid contaminating other personnel or transporting equipment. If the injured person can be moved, he/she will be decontaminated by site personnel as described above before emergency responders handle the victim. If the person cannot be moved because of the extent of the injury (a back or neck injury), provisions must be made to ensure that emergency response personnel will be able to respond to the victim without being exposed to potentially hazardous atmospheric conditions. If the potential for inhalation hazards exists, such as with open excavation, this area will be covered with polyethylene sheeting to eliminate any potential inhalation hazards. All emergency personnel should be immediately informed of the injured person's condition, and potential contaminants, and provided with all pertinent data.

### 9.2.5 Hand-Held Equipment Decontamination

Hand-held equipment includes all monitoring instruments as stated earlier, samples, hand tools, and notebooks. The hand-held equipment is dropped at the first decontamination station to be decontaminated by one of the decontamination team members. These items must be decontaminated or discarded as waste prior to removal from the CRZ.

To aid in decontamination, monitoring instruments can be sealed in plastic bags or wrapped in polyethylene. This will also protect the instruments against contaminants. The instruments will be wiped clean using wipes or paper towels if contamination is visually evident. Sampling equipment, hand tools, etc. will be cleaned with non-phosphorous soap to remove any potentially contaminated soil and rinsed with deionized water. All decontamination fluids will be containerized and stored on-site pending waste characterization sampling and appropriate off-site disposal.

### 9.2.6 Heavy Equipment Decontamination

All heavy equipment and vehicles arriving at the work site will be free from contamination from offsite sources. Any vehicles arriving at work that are suspected of being impacted will not be permitted on the work site. Potentially contaminated heavy equipment will not be permitted to

leave the EZ unless it has been thoroughly decontaminated and visually inspected by the HSO or his appointed substitute.

### 9.3 Support Zone

The support zone or cold zone will include the remaining areas of the job site. Break areas and support facilities (including equipment storage and maintenance areas) will be in this zone. No equipment or personnel will be permitted to enter the cold zone from the hot zone without passing through the decontamination station in the warm zone (if necessitated). Eating, smoking, and drinking will be allowed only in this area.

### 9.4 Communications

The following communications equipment will be utilized as appropriate.

- Telephones - A cellular telephone will be located with the HSO for communication with HSM and emergency support services/facilities.
- Hand Signals - Hand signals must be used by field teams, along with the buddy system. The entire field team must know them before operations commence and their use covered during site-specific training. Typical hand signals are the following:

| Hand Signal | Meaning |
|---|---|
| Hand gripping throat | Out of air, cannot breathe |
| Grip your partner's wrists or place both hands around the waist | Leave immediately without debate |
| Hands on top of head | Need assistance |
| Thumbs up | OK; I am all right; I understand |
| Thumbs down | No; negative |
| Simulated "stick" break with fists | Take a break; stop work |

### 9.5 The Buddy System

When working in teams of two or more, workers will use the "buddy system" for all work activities to ensure that rapid assistance can be provided in the event of an emergency. This requires work groups to be organized such that workers can remain close together and maintain visual contact with one another. Workers using the "buddy system" have the following responsibilities:

- Provide his/her partner with assistance.
- Observe his/her partner for signs of chemical or heat exposure.
- Periodically check the integrity of his/her partner's PPE.
- Notify the HSO or other site personnel if emergency service is needed.

## 10.0 NEAREST MEDICAL ASSISTANCE

The address and telephone number of the nearest hospital:

Saint Joseph's Medical Center
127 S Broadway
Yonkers, New York
914-378-7000

A map with directions to the hospital is shown in Figure 2. This information will either be posted prominently on the site or will be available to all personnel all the time. Further, all field personnel, including HSO & FTL, will know the directions to the hospital.

## 11.0 STANDING ORDERS/SAFE WORK PRACTICES

The standing orders, which consist of a description of safe work practices that must always be followed while on-site by Langan employees and contractors, are shown in Attachment A. The site HSO and FTL each have the responsibility for enforcing these practices. The standing orders will be posted prominently at the site or are always made available to all personnel. Those who do not abide by these safe work practices will be removed from the site.

## 12.0 SITE SECURITY

No unauthorized personnel must be permitted access to the work areas.

## 13.0 UNDERGROUND UTILITIES

As provided in Langan's Underground Utility Clearance Guidelines, the following safe work practices should be followed by Langan personnel and the contractor before and during subsurface work in accordance with federal, state, and local regulations:

- Obtain available utility drawings from the property owner/client or operator.
- Provide utility drawings to the project team.
- In the field, mark the proposed area of subsurface disturbance (when possible).
- Ensure that the utility clearance system has been notified.
- Ensure that utilities are marked before beginning subsurface work.
- Discuss subsurface work locations with the owner/client and contractors.
- Obtain approval from the owner/client and operators for proposed subsurface work locations.
- Use safe digging procedures when applicable.
- Stay at least ten feet from all equipment performing subsurface work.
- Ensure that the one-call (811) system or state utility hotline in your area has been

notified. Private mark-outs may require the use of ground penetrating radar (GPR).

- Attempt to stay at least 15 feet from subsurface electrical lines and at least 10 feet from all other utility lines or mark-outs. Minimum clearance distances may increase as per chart below.
- Hand auger subsurface boreholes and test pits to 5 feet below ground surface.

TABLE A—MINIMUM CLEARANCE DISTANCES

| Voltage (nominal, kV, alternating current) | Minimum clearance distance (feet) |
|---|---|
| up to 50 | 10 |
| over 50 to 200 | 15 |
| over 200 to 350 | 20 |
| over 350 to 500 | 25 |
| over 500 to 750 | 35 |
| over 750 to 1,000 | 45 |
| over 1,000 | (as established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution). |

## 14.0 SITE SAFETY INSPECTION

The Langan HSO, or alternate, will check the work area daily, at the beginning and end of each work shift, or more frequently to ensure safe work conditions. The HSO or alternate must complete the Jobsite Safety Inspection Checklist, found in Attachment F. Any deficiencies must be shared with the FTL, HSM, and PM and will be discussed at the daily tailgate meeting.

## 15.0 HAND AND POWER TOOLS

All hand- and electric-power tools and similar equipment must be maintained in safe operating condition. All electric-power tools must be inspected before initial use. Damaged tools must be removed immediately from service or repaired. Tools must be used only for the purpose for which they were designed. All users must be properly trained in their safe operation.

## 16.0 EMERGENCY RESPONSE

### 16.1 General

This section establishes procedures and provides information for use during a project emergency. Emergencies happen unexpectedly and quickly and require an immediate response; therefore, contingency planning and advanced training of staff is essential. Specific elements of emergency support procedures that are addressed in the following subsections include communications, local emergency support units, and preparation for medical emergencies, first aid for injuries incurred on site, record keeping, and emergency site evacuation procedures. In case of emergency, in addition to 911, call *WorkCare - Incident Intervention®* at 1-888-479-7787 to report their injuries. For all other communications, contact the Langan Incident Hotline at **973-560-4699** as soon as possible.

Should outside assistance be needed for accidents, fire, or release of hazardous substances, the emergency numbers will be available and posted at the site (Table 5) where a readily accessible telephone is made available for emergency use.

Also, in the event of an incident where a team member becomes exposed or suffers from an acute symptom from contact with site materials and must be taken to a hospital, a short medical data sheet (Attachment C) for that individual will be made available to the attending physician. The medical data sheet will include the following:

- Name, address, home phone
- Age, height, weight
- Name of person to be notified in case of an accident.
- Allergies
- Sensitivities
- Does he/she wear contact lenses?
- Short checklist of previous illness
- Name of personal physician and phone
- Name of company physician and phone
- Prescription and non-prescription medications currently used.

An incident reporting form is included in Attachment C.

## 16.2 Responsibilities

### 16.2.1 Health and Safety Officer (HSO)

The HSO is responsible for ensuring that all personnel are evacuated safely, and that machinery and processes are shut down or stabilized in the event of a stop work order or evacuation. The HSO is responsible for ensuring the HSM is notified of all incidents, all injuries, near-misses, fires, spills, releases, or equipment damage. The HSO is required to immediately notify the HSM of any fatalities or catastrophes (three or more workers injured and hospitalized) so that the HSM can notify OSHA within the required time limit.

### 16.2.2 Emergency Coordinator

The HSO or their designated alternate will serve as the Emergency Coordinator. The Emergency Coordinator is responsible for ensuring that all personnel are evacuated safely, and that machinery and processes are shut down or stabilized in the event of a stop work order or evacuation. They are also responsible for ensuring HSM is notified of all incidents, all injuries, near misses, fires, spills, releases, or equipment damage. The Emergency Coordinator is

required to immediately notify the HSM of any fatalities or catastrophes (three or more workers injured and hospitalized.

The Emergency Coordinator must locate emergency phone numbers and identify hospital routes prior to beginning work on the sites. The Emergency Coordinator must make necessary arrangements to be prepared for any emergencies that could occur.

The Emergency Coordinator is responsible for implementing the Emergency Response Plan.

### 16.2.3 Site Personnel

Project site personnel are responsible for knowing the Emergency Response Plan and the procedures contained herein. All personnel are expected to notify the Emergency Coordinator of situations that could constitute a site emergency. Project site personnel, including all subcontractors, will be trained in the Emergency Response Plan.

## 16.3 Communications

Once an emergency has been stabilized, the injured Langan personnel should contact *WorkCare - Incident Intervention®* at 1-888-479-7787 to report their injuries. For all other communications, contact the Langan Incident Hotline at **973-560-4699** as soon as possible.

## 16.4 Local Emergency Support Units

To be able to deal with any emergency that might occur during investigative activities at the site, the Emergency Notification Numbers (Table 5) will be posted and provided to all personnel conducting work within the EZ.

Figure 2 shows the hospital route map. Outside emergency number 911 and local ambulances should be relied on for response to medical emergencies and transport to emergency rooms. Always contact first responders when there are serious or life-threatening emergencies on the site. Project personnel are instructed not to drive injured personnel to the Hospital. In the event of an injury, provide first aid and keep the injured party calm and protected from the elements, and treat for shock when necessary.

## 16.5 Pre-Emergency Planning

Langan will communicate directly with administrative personnel from the emergency room at the hospital to determine whether the hospital has the facilities and personnel needed to treat cases of trauma resulting from any of the contaminants expected to be found on the site. Instructions for finding the hospital will be posted conspicuously in the site office and each site vehicle.

## 16.6 Emergency Medical Treatment

The procedures and rules in this HASP are designed to prevent employee injury. However, if an injury occurs, no matter how slight, it will be reported to the HSO immediately. First-aid equipment will be available on-site at the following locations:

- First Aid Kit: Contractor Vehicles
- Emergency Eye Wash: Contractor Vehicles

During the site safety briefing, project personnel will be informed of the location of the first aid station(s) that has been set up. Some injuries, such as severe cuts and lacerations or burns, may require immediate treatment. First-aid instructions provided from off-site doctors or paramedics, before an emergency-response squad arrives at the site or before the injured person can be transported to the hospital, will be followed closely. Only in non-emergency situations may an injured person be transported to an urgent care facility. Due to hazards that may be present at the site and the conditions under which operations are conducted, an emergency may develop. Emergencies can be characterized by injury or acute chemical exposure to personnel, fire or explosion, environmental release, or hazardous weather conditions.

## 16.8 Emergency Site Evacuation Routes and Procedures

All project personnel will be instructed on proper emergency response procedures and locations of emergency telephone numbers during the initial site safety meeting. If an emergency occurs because of the site investigation activities, including but not limited to fire, explosion, or significant release of toxic gas into the atmosphere, the Langan Project Manager will be verbally notified immediately. All heavy equipment will be shut down, and all personnel will evacuate the work areas and assemble at the nearest intersection to be accounted for and to receive further instructions.

If an emergency arises, the FTL will implement an immediate evacuation of all project personnel due to immediate or impending danger. The FTL will also immediately communicate with the contractor to coordinate any needed evacuation of the property.

The FTL or Site Supervisor will give necessary instructions until the Designated Incident Commander (IC) assumes control. After the emergency has been resolved, the FTL or Site Supervisor will coordinate with the IC and indicate when staff should resume their normal duties. If dangers are present for those at the designated assembly point, another designated location of assembly will be established.

It will be the responsibility of the FTL or Site Supervisor to report a fire or emergency, assess the seriousness of the situation, and initiate emergency measures until the arrival of the local fire fighters or other first responders, should they be necessary. The FTL, working with emergency

responders, may also order the closure of the Site for an indefinite period if it is deemed necessary.

Under no circumstances will incoming visitors be allowed to proceed to the area of concern once an emergency evacuation has been carried out. Visitors or other people present in the emergency must be instructed to evacuate the area. The FTL will ensure that access roads are not obstructed and will remain on-site to provide stand-by assistance upon the arrival of emergency personnel.

If it is necessary to temporarily control traffic in the event of an emergency, those people controlling traffic will wear proper reflection warning vests until the arrival of police or fire personnel.

### 16.8.1 Designated Assembly Locations

All personnel will evacuate the site and assemble at a designated assembly location. The assembly location will be designated by Langan personnel and discussed during each shift's pre-job safety briefing.

### 16.8.2 Accounting for Personnel

All contractors and subcontractor supervisors are responsible for the accounting of all personnel assembled at the designed assembly area. The Designated Incident Commander must be notified if personnel are not found.

## 16.9 Fire Prevention and Protection

In the event of a fire or explosion, procedures will include immediately evacuating the site and notification of the Langan Project Manager of the investigation activities. Portable fire extinguishers will be provided at the work zone. The extinguishers located in the various locations should also be identified prior to the start of work. No personnel will fight a fire beyond the stage where it can be put out with a portable extinguisher (incipient stage).

### 16.9.1 Fire Prevention

Fires will be prevented by adhering to the following precautions:

- Good housekeeping and storage of materials.
- Storage of flammable liquids and gases away from oxidizers.
- Shutting off engines to refuel.
- Grounding and bonding metal containers during transfer of flammable liquids.
- Use of UL approved flammable storage cans.

- Fire extinguishers rated at least 10 pounds ABC located on all heavy equipment, in all trailers and near all hot work activities.

The person responsible for the control of fuel source hazards and the maintenance of fire prevention and/or control equipment is the HSO.

### 16.10 Significant Vapor Release

Based on the proposed tasks, the potential for significant vapor release is low. However, if a release occurs, the following steps will be taken:

- Move all personnel to an upwind location. All non-essential personnel must evacuate.
- Upgrade to Level C Respiratory Protection.
- Downwind perimeter locations must be monitored for volatile organics.
- If the release poses a potential threat to human health or the environment in the community, the Emergency Coordinator must notify the Langan Project Manager.
- Local emergency response coordinators will be notified.

### 16.11 Overt Chemical Exposure

The following are standard procedures to treat chemical exposures. Other, specific procedures detailed on the Material Safety Data Sheet (MSDS) will be followed, when necessary.

**SKIN AND EYE**: Use copious amounts of soap and water from eye-wash kits and portable hand-wash stations.

**CONTACT**: Wash/rinse affected areas thoroughly, then provide appropriate medical attention. Skin must also be rinsed for 15 minutes if contact with caustics, acids, or hydrogen peroxide occurs. Affected items of clothing must also be removed from contact with skin.

Providing wash water and soap will be the responsibility of each individual contractor or subcontractor on-site.

### 16.12 Decontamination during Medical Emergencies

If emergency lifesaving first aid and/or medical treatment is required, normal decontamination procedures may need to be abbreviated or omitted. The HSO or appointed substitute will accompany contaminated victims to the medical facility to advise on matters involving decontamination when necessary. The outer garments can be removed if they do not cause delays, interfere with treatment, or aggravate the problem. Respiratory equipment must always be removed. Protective clothing can be cut away. If the outer contaminated garments cannot be safely removed on site, a plastic barrier placed between the injured individual and clean surfaces should be used to help prevent contamination of the inside of ambulances and/or medical

personnel. Outer garments may then be removed at the medical facility. No attempt will be made to wash or rinse the victim if his/her injuries are life threatening unless it is known that the individual has been contaminated with extremely toxic or corrosive material which could also cause severe injury or loss of life to emergency response personnel. For minor medical problems or injuries, normal decontamination procedures will be followed.

### 16.13 Adverse Weather Conditions

In the event of adverse weather conditions, the HSO will determine if work continues without potentially risking the safety of all field workers. Some of the items to be considered prior to determining if work should continue are:

- Potential for heat stress and heat-related injuries.
- Potential for cold stress and cold-related injuries.
- Treacherous weather-related working conditions (hail, rain, snow, ice, high winds).
- Limited visibility (fog).
- Potential for electrical storms.
- Earthquakes.
- Other major incidents.

Site activities will be limited to daylight hours, or when suitable artificial light is provided, and acceptable weather conditions prevail. The HSO will determine the need to cease field operations or observe daily weather reports and evacuate, if necessary, in case of severe inclement weather conditions.

### 16.14 Spill Control and Response

All small spills/environmental releases must be contained as close to the source as possible. Whenever possible, the SDS will be consulted to assist in determining proper waste characterization and the best means of containment and cleanup. For small spills, sorbent materials such as sand, sawdust, or commercial sorbents should be placed directly on the substance to contain the spill and aid recovery. Any acid spills should be diluted or neutralized carefully prior to attempting recovery. Berms of earthen or sorbent materials can be used to contain the leading edge of the spills. All spill containment materials will be properly disposed of. An exclusion zone of 50 to 100 feet around the spill area should be established depending on the size of the spill.

All contractor vehicles must have spill kits on them with enough material to contain and absorb the worst-case spill from that vehicle. All vehicles and equipment must be inspected prior to being admitted on-site. Any vehicle or piece of equipment that develops a leak will be taken out of service and removed from the job site.

The following seven steps must be taken by the Emergency Coordinator:

1. Determine nature, identity, and amounts of major spills.
2. Make sure all unnecessary people are removed from the spill area.
3. Notify the HSO immediately.
4. Use proper PPE in consultation with the HSO.
5. If a flammable liquid, gas, or vapor is involved, remove all ignition sources, and use non-sparking and/or explosion-proof equipment to contain or clean up the spill (diesel-only vehicles, air-operated pumps, etc.)
6. If possible, try to stop the leak with the appropriate material.
7. Remove all surrounding materials that can react or compound with the spill.

In addition to the spill control and response procedures described in this HASP, Langan personnel will coordinate with the designated project manager relative to spill response and control actions. Notification to the Project Manager must be immediate and, to the extent possible, include the following information:

- Time and location of the spill.
- Type and nature of the material spilled.
- Amount spilled.
- Whether the spill has affected or has a potential to affect a waterway or sewer.
- A brief description of affected areas/equipment.
- Whether the spill has been contained.
- Expected time of cleanup completion. If spill cleanup cannot be handled by Langan's on-site personnel alone, such fact must be conveyed to the Project Manager immediately.

Langan field personnel must notify the project manager when they observe a spill or encounter conditions suggesting one might have occurred.

### 16.15 Emergency Equipment

The following minimum emergency equipment must be kept and maintained on site:

- Industrial first aid kit.
- Fire extinguishers (one per site).

### 16.16 Restoration and Salvage

After an emergency, prompt restoration of utilities, fire protection equipment, medical supplies, and other equipment will reduce the possibility of further losses. Some of the items that may need to be addressed are:

- Refilling fire extinguishers.
- Refilling medical supplies.
- Recharging eyewashes and/or showers.
- Replenishing spill control supplies.

### 16.17 Documentation

Immediately following an incident or near miss, unless emergency medical treatment is required, either the employee or a coworker must contact the Langan Incident/Injury Hotline at 1-(800)-9-LANGAN (extension 4699) and the client representative to report the incident or near miss. For emergencies involving personnel injury and/or exposure, the HSO and affected employee will complete and submit an Employee Exposure/Injury Incident Report (Attachment C) to the Langan Corporate Construction Health and Safety Manager as soon as possible following the incident.

## 17.0 SPECIAL CONDITIONS

This guideline contains information and requirements for special conditions that may not be routinely encountered.

### 17.1 Scope

The guideline applies to the specific projects identified within this document. Additional provisions will be addressed in each Site-Specific Construction Health and Safety Plan (HASP), as needed.

### 17.2 Responsibilities

Site Personnel - All site personnel must be alert to safety hazards on work sites and take action to minimize such hazards. Personnel must utilize the buddy system, watch for inappropriate behavior, and be alerted to changes in site conditions.

Construction Health and Safety Officer (HSO) - The HSO is responsible for considering these procedures in the development of site-specific HASPs. The HSO must schedule frequent "tail gate" safety briefings to enhance safety awareness and discuss potential problems.

### 17.3 Procedures

The procedures outlined below must be followed when such conditions are encountered.

#### 17.3.1 Ladders

Langan safety procedures must be used to ensure employee safety when using ladders in the office or work sites. All ladders must be coated or repaired to prevent injury to the employee

from punctures or lacerations and to prevent snagging or clothing. Any wood ladder used must have an opaque cover except for identification or warning labels, which may be placed on one face only of a side rail.

#### *17.3.1.1 Ladder Use*

Employees must only use ladders for the purposes they were designed for and must not be used as scaffolding. Ladders will be maintained and inspected prior to use for slip hazards including oil and grease. Employees must use ladders only on stable and level surfaces unless the ladder is secured to prevent displacement. Ladders should not be used on slippery surfaces unless secured or provided with slip-resistant feet to prevent accidental displacement. Ladders should not be used in locations where they could be displaced by workplace activities or traffic. Ladder rungs, cleats and steps must be parallel, level and uniformly spaced when the ladder is in the use position.

Employees should not be carrying anything, including equipment that could cause injury if there was a fall while utilizing the ladder. The top and bottom of the ladder area must remain clear while in use. When ascending and descending the ladder, employees must face the ladder.

Ladders must not be loaded beyond the maximum intended load for which they were built or the manufacturer's rated capacity.

#### *17.3.1.2 Portable Ladders*

Rungs, cleats, and steps for portable ladders and fixed ladders must be spaced not less than 10 inches apart, nor more than 14 inches apart, as measured between center lines of the rungs, cleats, and steps. When used to access an upper landing surface, the ladder side rails must extend at least three feet above the upper landing surface to which the ladder is used to gain access. If this is not possible, due to the length of the ladder, then the top of the ladder must be secured at its top to a rigid support.

#### *17.3.1.3 Step Stools*

Rungs, cleats, and steps of step stools must not be less than 8 inches apart, nor more than 12 inches apart, as measured between center lines of the rungs, cleats, and steps.

#### *17.3.1.4 Extension Ladders*

Rungs, cleats, and steps of the base section of extension trestle ladders must be spaced not less than 8 inches apart, nor more than 18 inches apart, as measured between center lines of the rungs, cleats, and steps. The rung spacing on the extension section of the extension trestle ladder must not be less than 6 inches nor more than 12 inches, as measured between the center

lines of the rungs, cleats and steps. Ladders must be used at an angle such that the horizontal distance from the top support to the foot of the ladder is approximately one-quarter of the working length of the ladder (the distance along the ladder between the foot and the top support).

#### *17.3.1.5 Inspection*

Ladders will be inspected for visible detects periodically, prior to utilization or after any occurrence that could have negatively affected the ladder. Portable ladders with defects including broken or missing rungs, cleats, or steps, broken or split rails, corroded components, or other faulty components must not be used. The ladder will be immediately marked as defective, tagged as "Do Not Use" or blocked from being used and removed from service until repaired.

### 17.3.2 First Aid/Cardiopulmonary Resuscitation (CPR)

Langan field and office personnel will be encouraged to be trained in First Aid and Cardiopulmonary Resuscitation (CPR). Training will be provided free of charge by Langan to all employees. Employees will receive a training certificate that will be kept with the Health & Safety Coordinator (HSC). Training and certification will be provided by a credited provider such as American Red Cross or equivalent.

#### *17.3.2.1 Emergency Procedures*

Prior to site work, the Langan employees certified in first aid and CPR will be identified in the site-specific HASP. Langan will endear having at least one employee at a job site trained and able to render first aid and CPR. The site-specific HASP will contain first aid information on both potential chemical and physical hazards. Emergency procedures to be followed in case of injury or illnesses are provided in HASP. The HASP will include emergency contact information including local police and fire departments, hospital emergency rooms, ambulance services, on-site medical personnel, and physicians. The HASP will also include directions and contact information for the nearest emergency facility in case immediate medical attention is required. The emergency contact information will be conspicuously posted at the worksite. Employees that are injured and require immediate medical attention must call either 911 or the local posted emergency contacts. Employees should use ambulatory services to transport injured workers to the nearest facility for emergency medical care. In areas where 911 is not available, the telephone numbers of physicians, hospitals, or ambulances must be conspicuously posted.

#### *17.3.2.2 First Aid Supplies*

First aid supplies are readily available to all Langan employees when required. First aid kits are in each Langan office. Portable first aid kits are available for employees to use at work sites. First aid kits should consist of items needed to treat employees for potential chemical and

physical injuries. At a minimum, first aid kits should contain items to allow basic first aid to be rendered. Where the eyes or body of an employee may be exposed to corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body must be provided within the work area for immediate emergency use including eye wash solution.

First aid kits will be weatherproof with individually sealed packages of each item. All portable first aid kits must be inspected by Langan employees before and after use to ensure all used items are replaced. When out in the field, employees must check first aid kits weekly to ensure used items are replaced.

### 17.3.3 Hydrogen Sulfide

Langan employees with the potential to be exposed to hydrogen sulfide while at work sites must have training in hydrogen sulfide awareness. The training will include the identification of areas where employees could be exposed to hydrogen sulfide, health effects, permissible exposure limits, first aid procedures, and personnel protective equipment. Langan employees could be exposed to hydrogen sulfide while at job sites including petroleum refineries, hazardous waste treatment, storage and disposal facilities, uncontrolled hazardous waste sites, and remediation projects.

#### *17.3.3.1 Characteristics*

Hydrogen sulfide is a colorless gas with a strong odor of rotten eggs that is soluble in water. Hydrogen sulfide is used to test and make other chemicals. It is also found as a by-product of chemical reactions, such as in sewer treatment. It is a highly flammable gas and a dangerous fire hazard. Poisonous gases are produced in fires including sulfur oxides. Hydrogen sulfide is not listed as a carcinogen.

#### *17.3.3.2 Health Effects*

Hydrogen Sulfide can affect employees if inhaled or through contact with skin or eyes. Acute (or short-term) health effects of hydrogen sulfide exposure include irritation of the nose and throat, dizziness, confusion, headache, and trouble sleeping. Inhalation of hydrogen sulfide can irritate the lungs causing coughing and/or shortness of breath. Higher levels of exposure can cause a build-up of fluids in the lungs (pulmonary edema), a medical emergency, with severe shortness of breath.

Chronic (or long-term) health effects of low levels of exposure to hydrogen sulfide can cause pain and redness of the eyes with blurred vision. Repeated exposure may cause bronchitis with cough, phlegm, and shortness of breath.

*17.3.3.3 Protective Clothing and Equipment*

Respirators are required for those operations in which employees will be exposed to hydrogen sulfide above OSHA permissible exposure level. The maximum OSHA permissible exposure limit (PEL) for hydrogen sulfide is 20 parts of hydrogen sulfide vapor per million parts of air (20 ppm) for an 8-hour workday, and the maximum short-term exposure limit (STEL) is 10 ppm for any 10-minute period.

Where employees are exposed to levels up to 100 parts of hydrogen sulfide vapor per million parts of air (100 ppm), the following types of respiratory protection are allowed:

- Any powered, air-purifying respirator with cartridge(s).
- Any air-purifying, full-facepiece respirator (gas mask) with a chin style, front- or back-mounted canister.
- Any supplied air system with escape self-contained breathing apparatus, if applicable; and,
- Any self-contained breathing apparatus with a full facepiece.

Respirators used by employees must have Mine Safety and Health Administration and the National Institute for Occupational Safety and Health (NIOSH) with approval. Cartridges or canisters must be replaced before the end of their service life, or the end of the shift, whichever occurs first. Langan employees that have the potential to be exposed to hydrogen sulfide will be trained in the proper use of respirators. Respirator training is discussed under– Langan's Respiratory Protection Program.

Employees with potential exposure to hydrogen sulfide, or when required by the client, will wear a portable hydrogen sulfide gas detector. The detector should have an audible, visual, and vibrating alarm. The detector may also provide detection for carbon monoxide, sulfur dioxide, and oxygen-deficient atmospheres. The hydrogen sulfide monitor will, at a minimum, be calibrated to detect hydrogen sulfide at a level of 20 parts of hydrogen sulfide vapor per million parts of air (20 ppm). Many portable gas detectors will have factory settings with a low-level alarm at 10 ppm and a high-level alarm at 15 ppm. Langan employees must consult clients to determine if any site-specific threshold levels exist.

If the hydrogen sulfide gas detector sounds and employees are not wearing appropriate respiratory protection, employees must immediately vacate the area and meet at the assigned emergency location. Langan employees may not re- enter the site without proper respiratory protection and approval from the client or property owner if needed.

Employees must wear PPE to prevent eye and skin contact with hydrogen sulfide. Employees must wear appropriate protective clothing including boots, gloves, sleeves, and aprons, over any

parts of their body that could be exposed to hydrogen sulfide. Non-vented, impact-resistant goggles should be worn when working with or exposed to hydrogen sulfide.

*17.3.3.4 Emergency and First Aid Procedures*

**Eye and Face Exposure**

If hydrogen sulfide encounters eyes, it should be washed out immediately with large amounts of water for 30 minutes, occasionally lifting the lower and upper eye lids. Seek medical attention immediately.

**Skin Exposure**

If hydrogen sulfide contaminates clothing or skin, remove the contaminated clothing immediately and wash the exposed skin with large amounts of water and soap. Seek medical attention immediately. Contaminated clothing should either be disposed of or washed before wearing again.

**Breathing**

If a Langan employee or other personnel breathe in hydrogen sulfide, immediately get the person exposed to fresh air. If breathing has stopped, artificial respiration should be started. Call for medical assistance or a doctor as soon as possible.

**Safety Precautions**

Hydrogen sulfide is a highly flammable gas and a dangerous fire hazard. Containers of hydrogen sulfide may explode in a fire situation. Poisonous gases are produced during fires.

Langan employees should contact property owners and operators prior to conducting work onsite to be aware of any site-specific contingency plans, identify where hydrogen sulfide is used at the facility, and be informed about additional safety rules or procedures.

### 17.3.4 Fire Protection/Extinguishers

Langan field personnel that have been provided with portable fire extinguishers for use at worksites will be trained to familiarize employees with general principles of fire extinguisher use and hazards associated with the incipient stage of firefighting. Training will be provided prior to the initial assignment for field work and annually thereafter.

Portable fire extinguishers must be visually inspected monthly and subjected to an annual maintenance check. Langan will retain records of the annual maintenance date.

### 17.3.5 Overhead lines

When field work is performed near overhead lines, the lines must be de-energized and grounded, or other protective measures must be provided before the work commences. If overhead lines are to be de-energized, arrangements must be made with the client, property owner, or organization that operates or controls the electric circuits involved to de-energize and ground them. If protective measures, such as guarding, isolating, or insulating, are provided, these precautions must prevent employees from contacting such lines directly with any part of their body or indirectly through conductive materials, tools, or equipment.

When unqualified Langan personnel are working in an elevated position near overhead lines, the location must be such that the person and the longest conductive object they may contact cannot come closer to any unguarded, energized overhead line than the following distances:

1. For voltages to ground 50 kilovolts (kV) or below - 10 feet; and
2. For voltages to ground over 50kV - 10 feet, plus 4 inches for every 10kV over 50kV.

As previously indicated, Langan does not retain qualified employees to perform work on energized equipment.

#### *17.3.5.1 Vehicle and Equipment Clearance*

Any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines must be operated so that a clearance of 10 feet is maintained. If the voltage of the overhead lines is higher than 50kV, the clearance must be increased by 4 inches for every 10kV over that voltage.

If any of the following conditions discussed occur, the clearance may be reduced.

- If the vehicle is in transit with its structure lowered, the clearance may be reduced to 4 ft. If the voltage is higher than 50kV, the clearance must be increased to 4 inches for every 10 kV over that voltage.
- If insulating barriers are installed to prevent contact with the lines, and if the barriers are rated for the voltage of the line being guarded and are not a part of or an attachment to the vehicle or its raised structure, the clearance may be reduced to a distance within the designed working dimensions of the insulating barrier.

Employees standing on the ground may not contact the vehicle or mechanical equipment or any of its attachments unless the employee is using protective equipment rated for the voltage, or the equipment is located so that no uninsulated part of its structure (that portion of the structure that provides a conductive path to employees on the ground) can come closer to the overhead line than permitted.

If any vehicle or mechanical equipment capable of having parts of its structure elevated near energized overhead lines is intentionally grounded, employees working on the ground near the point of grounding may not stand at the grounding location whenever there is a possibility of overhead line contact. Additional precautions, such as the use of barricades or insulation, must be taken to protect employees from hazardous ground potential, depending on earth resistivity and fault currents, which can develop within the first few feet or more outward from the grounding point.

### 17.3.6 Trade Secret

Langan employees could potentially be provided with secret trade information by the client or property owner when site-specific information is provided about highly hazardous chemicals. Trade secret means any confidential formula, pattern, process, device, information, or compilation of information that is used in an employer's business, and that allows the employer to obtain an advantage over competitors who do not know or use it. Langan employees understand that this information should be kept confident and if required, may enter into a confidentiality agreement with the client.

### 17.3.7 Bloodborne Pathogens

Langan employees that can anticipate exposure to blood or other potentially infectious material while at work sites must have training in bloodborne pathogens. Applicable employees would include those trained in first aid and serving a designated role as an emergency medical care provider. Bloodborne pathogens are pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include but are not limited to hepatitis B virus and human immunodeficiency virus.

#### *17.3.7.1 Training*

Langan employees with potential occupational exposure to blood or other potentially infectious material must participate in a training program. Training must be conducted prior to the initial assignment where there would be potential for exposure and annually thereafter within one year of previous training. The training program will be provided to Langan employees at no cost to them and during working hours.

Langan will ensure the training program must consist of the following:

- An accessible copy of the regulatory text of 29 CFR 1910.1030 and an explanation of its contents.
- A general explanation of the epidemiology and symptoms of bloodborne diseases.
- An explanation of the modes of transmission of bloodborne pathogens.

- An explanation of Langan's exposure control plan and how the employee can obtain a copy of the written plan.
- An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
- An explanation of the use and limitations of personal protective equipment (PPE) to prevent and reduce exposure.
- Information on the types, proper use, location, removal, handling, and disposal of PPE.
- An explanation of the basis for the selection of PPE.
- Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge.
- Information on the appropriate actions to take and people to contact in an emergency involving blood or other potentially infectious materials.
- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- Information on the post-exposure evaluation and determining whether the employer is required to provide for the employee following an exposure incident.
- An explanation of the signs and labels and/or color coding required by paragraph 29 CFR 1910.1030(g)(1); and
- An opportunity for interactive questions and answers with the person conducting the training session.

Langan will develop and implement a written Exposure Control Plan, which will be designed to eliminate or minimize employee exposure to bloodborne pathogens. The Exposure Control Plan will contain the following elements:

- An exposure determination for employees.
- The schedule and method of implementation for Methods of Compliance (29 CFR 191.1030(d)), Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-up (29 CFR 1910.1030(f)), Communication of Hazards to Employees (29 CFR 1910.1030(g)) and (h) Recordkeeping (29 CFR 1910.1030(h)).
- The procedure for the evaluation of circumstances surrounding exposure incidents.
- Ensure a copy of the Exposure Control Plan will be accessible to employees; and,
- The Exposure Control Plan must be reviewed and updated at least annually.

Langan employees with occupational exposure to bloodborne pathogens include any employees trained in first aid that would be expected to provide emergency medical care. This determination is made without regard to the use of PPE, which could eliminate or minimize exposure.

Universal precautions must be observed to prevent contact with blood or other potentially infectious materials. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for bloodborne pathogens. When differentiation between body fluid types is difficult or impossible, all body fluids must be considered potentially infectious materials.

Work practice controls must be used to eliminate or minimize employee exposure, if applicable. Since Langan employees will have occupational exposure only during the rendering of first aid, personnel protective equipment will be utilized to reduce or minimize exposure. PPE that could be available to Langan personnel when administering first aid includes safety glasses, gloves, and Tyvek suits or sleeves. PPE and first aid kits will be provided to employees at no cost to them.

Langan employees that render first aid in office areas will have access to hand-washing facilities or restrooms. For first aid rendered at field locations, first aid kits will contain an appropriate antiseptic hand cleanser and clean cloth/paper towels or antiseptic towelettes. After using antiseptic hand cleansers or towelettes, employees must wash their hands with soap and running water as soon as feasible.

After administering first aid, potentially infectious materials, including towels, personnel protective equipment, clothes, and bandages, must be placed in a container, which prevents leakage during collection, handling, processing, storage, transport, or shipping. All PPE will be disposed of after use. Any equipment or working surfaces which were exposed to blood or potentially infectious materials due to an injury will be decontaminated prior to reuse.

Langan will make available the hepatitis B vaccine and vaccination series to all employees who have occupational exposure, and post-exposure evaluation and follow-up to all employees who have had an exposure incident. These services will be available to the employee at no cost to them through a medical provider.

#### *17.3.7.2 Recordkeeping*

Langan will maintain training and medical records for each employee with occupational exposure to blood or potentially infectious materials. Medical and training records will be maintained by Langan's H&S Department.

Training records will include the following:

- Dates of the training sessions.
- Contents or a summary of the training sessions.
- Names and qualifications of people conducting the training; and
- Names and job titles of all people attending the training sessions.

Training records must be maintained for 3 years from the date on which the training occurred. Medical records will be preserved and maintained for the duration of employment plus 30 years.

All records will be made available upon request to employees, the Assistant Secretary of Labor for Occupational Safety and Health, and the Director of the National Institute for Occupational Safety and Health Director of OSHA for examination and copying. Medical records must have written consent from the employee before releasing.

If Langan ceases to do business, all records must be transferred to the successor employer. The successor employer must receive and maintain these records.

If there is no successor, Langan will notify current employees of their rights to access records at least three months prior to the cessation of business.

## 18.0 RECORDKEEPING

The following is a summary of required health and safety logs, reports, and recordkeeping.

### 18.1 Field Change Authorization Request

Any changes to the work to be performed that are not included in the HASP will require an addendum that is approved by the Langan project manager and Langan HSM to be prepared. Approved changes will be reviewed with all field personnel at a safety briefing.

### 18.2 Medical and Training Records

Copies or verification of training (40-hour, 8-hour, supervisor, site-specific training, documentation of three-day on-the-job training (OJT), and respirator fit-test records) and medical clearance for site work and respirator use will be maintained in the office and available upon request. Records for all subcontractor employees must also be available upon request. All employee medical records will be maintained by HSM.

### 18.3 Onsite Log

A log of personnel on-site each day will be kept by the HSO or appointed substitute.

### 18.4 Daily Safety Meetings (“Tailgate Talks”)

Completed safety briefing forms (Attachment H) will be maintained by the HSO or FTL.

## 18.5 Exposure Records

All personal monitoring results, laboratory reports, calculations, and air sampling data sheets are part of an employee exposure record. These records will be maintained by the HSO during site work. At the end of the project, they will be maintained according to 29 CFR 1910.1020.

## 18.6 Hazard Communication Program - SDS

Safety Data Sheets (SDS) have been obtained for applicable substances and are included in this HASP (Attachment D). Langan's written hazard communication program, in compliance with 29 CFR 1910.1200, is maintained by the HSM.

## 18.7 Documentation

Immediately following an incident or near miss, unless emergency medical treatment is required, either the employee or a coworker must contact the Langan incident/injury hotline at 973-560-4699, and the Project Manager to report the incident or near miss. The Project Manager will contact the client or client representative. A written report must be completed and submitted HSM within 24 hours of the incident. For emergencies involving personnel injury and/or exposure, the employee will complete and submit the Langan incident/injury report to the Langan corporate health and safety manager as soon as possible following the incident. Accidents will be investigated in-depth to identify all causes and to recommend hazard control measures.

### 18.7.1 Accident and Injury Report Forms

#### *18.7.1.1 Accident/Incident Report*

All injuries, no matter how slight, must be reported to the FTL and the PM immediately. The accident/incident report forms, attached to Attachment C, will be filled out on all accidents by the applicable contractor supervision personnel, the FTL, or the HSO. Copies of all accident/incident reports must be kept on-site and available for review. Project personnel will be instructed on the location of the first aid station, hospital, and doctor and ambulance service near the job. The emergency telephone numbers will be conspicuously posted in site vehicles near the work zone. First aid supplies will be centrally located and conspicuously posted between restricted and nonrestricted areas to be readily accessible to all on the site.

#### *18.7.1.2 First Aid Treatment Record*

The forms will be used for recording all non-lost time injuries treated by the project first-aid attendant, the local physician or hospital will be entered in detail on this record. "Minor" treatment of scratches, cuts, etc. will receive the same recording attention as treatment of more severe injuries.

*18.7.1.3 OSHA Form 300*

An OSHA Form 300 will be kept at the Langan Corporate Office in Parsippany, New Jersey. All recordable injuries or illnesses will be recorded on this form. Subcontractor employers must also meet the requirements of maintaining an OSHA 300 form. The Incident Report form used to capture the details of work-related injuries/illnesses meets the requirements of the OSHA Form 301 (supplemental record) and must be maintained with the OSHA Form 300 for all recordable injuries or illnesses. Forms for recording OSHA work-related injuries and illnesses are included in Attachment C.

## 19.0 CONFINED SPACE ENTRY

Confined spaces are not anticipated at the Site during planned activities. If confined spaces are identified, the contractor must implement their own confined space program that are applicable to federal, state, and local regulations. Confined spaces **will not** be entered by Langan personnel.

## 20.0 HASP ACKNOWLEDGEMENT FORM

All Langan personnel and contractors will sign this HASP Compliance Agreement indicating that they have become familiar with this HASP and that they understand it and agree to abide by it.

| Printed Name | Signature | Company | Date |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

# TABLES

# TABLE 1
# TASK HAZARD ANALYSES

| Task | Hazard | Description | Control Measures | First Aid |
|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Contaminated Soil or Groundwater- Dermal Contact | Contaminated water spills on skin, splashes in eyes; contact with contaminated soil/fill during activities or sampling. | Wear proper PPE; follow safe practices, maintain safe distance from activities | See Table 2, seek medical attention as required |
| 1.3.1 – 1.3.14 | Lacerations, abrasions, punctures | Cutting bailer twine, pump tubing, acetate liners, etc. with knife; cuts from sharp site objects or previously cut piles, tanks, etc.; Using tools in tight spaces | Wear proper PPE; follow safe practices | Clean wound, apply pressure and/or bandages; seek medical attention as required. |
| 1.3.1 – 1.3.14 | Contaminated Media Inhalation | Opening drums, tanks, wells; vapors for non-aqueous phase liquids or other contaminated site media; dust inhalation during excavation; vapor accumulation in excavation | Follow air monitoring plan; have quick access to respirator, do not move or open unlabeled drums found at the site, maintain safe distance from activities | See Table 2, seek medical attention as required |
| 1.3.1 – 1.3.14 | Lifting | Improper lifting/carrying of equipment and materials causing strains | Follow safe lifting techniques.<br>Langan employees are not to carry contractor equipment or materials | Rest, ice, compression, elevation; seek medical attention as required |
| 1.3.1 – 1.3.14 | Slips, trips, and falls | Slips, trips, and falls due to uneven surfaces, cords, steep slopes, debris, and equipment in work areas | Good housekeeping at site; constant awareness and focus on the task; avoid climbing on stockpiles; maintain safe distance from activities and excavations; avoid elevated areas over six feet unless fully accredited in fall protection and wearing an approved fall protection safety apparatus | Rest, ice, compression, elevation; seek medical attention as required |
| 1.3.1 – 1.3.14 | Noise | Excavation equipment, hand tools, drilling equipment. | Wear hearing protection; maintain safe distance from activities | Seek medical attention as required |
| 1.3.1 – 1.3.14 | Falling objects | Soil material, tools, etc. dropping from drill rigs, front-end loaders, etc. | Hard hats to be worn at all times while in work zones; maintain safe distance from activities and excavations | Seek medical attention as required |
| 1.3.1 – 1.3.14 | Underground/ overhead utilities | Excavation equipment, drill rig auger contacts underground object; boom touches overhead utility | "One Call" before dig; follow safe practices; confirm utility locations with contractor; wear proper PPE; maintain safe distance from activities and excavations | Seek medical attention as required |
| 1.3.1 – 1.3.14 | Insects (bees, wasps, hornet, mosquitoes, and spider) | Sings, bites | Insect Repellent; wear proper protective clothing (work boots, socks, and light-colored pants); field personnel who may have insect allergies (e.g., bee sting) should provide this information to the HSO or FSO prior to commencing work and will have allergy medication on site. | Seek medical attention as required |
| 1.3.1 – 1.3.14 | Vehicle traffic / Heavy Equipment Operation | Vehicles unable to see workers on site, operation of heavy equipment in tight spaces, equipment failure, malfunctioning alarms | Wear proper PPE, especially visibility vest; use a buddy system to look for traffic; rope off area of work with cones and caution tape or devices at points of hazard, maintain safe distance from activities and equipment | Seek medical attention as required |

# TABLE 2
# CONTAMINANT HAZARDS OF CONCERN

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | 1,1-Dichloroethane<br>Asymmetrical dichloroethane<br>Ethylidene chloride<br>1,1-Ethylidene dichloride<br>1,1-DCA | 75-34-3 | PID | 100 ppm<br>3000 ppm | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the skin; central nervous system depression; liver, kidney, lung damage | Eye: Irrigate immediately<br>Skin: Soap flush promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | 1,2,4-Trimethylbenzene | 95-63-6 | PID | None<br>None | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat, respiratory system; bronchitis; hypochromic anemia; headache, drowsiness, lassitude (weakness, exhaustion), dizziness, nausea, incoordination; vomiting, confusion; chemical pneumonitis (aspiration liquid) | Eye: Irrigate immediately<br>Skin: Soap wash<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | 1,2-Dichlorobenzene<br>o-DCB | 95-50-1 | PID | 50 ppm<br>200 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eye, swelling periorbital (situated around the eye); profuse rhinitis; headache, anorexia, nausea, vomiting; weight loss, jaundice, cirrhosis; in animals: liver, kidney injury; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | 1,2-Dichloroethane<br>Ethylene dichloride<br>1,2-DCA<br>DCE[1]<br>Ethane dichloride<br>Dutch liquid, Dutch oil<br>Freon 150<br>Glycol dichloride | 107-06-2 | PID | 1 ppm<br>50 ppm | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin absorption, skin, and/or eye contact | irritation to the eyes, corneal opacity; central nervous system depression; nausea, vomiting; dermatitis; liver, kidney, cardiovascular system damage; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | 1,3,5-Trimethylbenzene<br>Mesitylene<br>sym-Trimethylbenzene | 108-67-8 | PID | None<br>None | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat, respiratory system; bronchitis; hypochromic anemia; headache, drowsiness, lassitude (weakness, exhaustion), dizziness, nausea, incoordination; vomiting, confusion; chemical pneumonitis (aspiration liquid) | Eye: Irrigate immediately<br>Skin: Soap wash<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | 1,3-Dichlorobenzene<br>m-Dichlorobenzol;<br>m-Phenylene dichloride<br>m-dichlorobenzene<br>m-DCB | 541-73-1 | PID | None<br>None | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, swelling periorbital (situated around the eye); profuse rhinitis; headache, anorexia, nausea, vomiting; weight loss, jaundice, cirrhosis; in animals: liver, kidney injury; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | 1,4-Dichlorobenzene para-Dichlorobenzene p-Dichlorobenzene 1,4-Dichlorobenzene 1,4-DCB para-Dichlorobenzene p-Dichlorobenzene p-DCB PDB Paramoth Para crystals Paracide Dichlorocide | 106-46-7 | PID | 75 ppm 150 ppm | Groundwater Soil Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, swelling periorbital (situated around the eye); profuse rhinitis; headache, anorexia, nausea, vomiting; weight loss, jaundice, cirrhosis; in animals: liver, kidney injury; [potential occupational carcinogen] | Eye: Irrigate immediately Skin: Soap wash Breathing: Respiratory support Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | 1,4-Dioxane 1,4-Dioxacyclohexane [1,4]Dioxane p-Dioxane [6]-crown-2 Diethylene dioxide Diethylene ether Dioxan Dioxane 1,4-Dioxane | 123-91-1 | PID | 100 ppm 500 ppm | Groundwater Soil Vapor | Inhalation, ingestion, skin, and/or eye contact | Irritant to eyes, skin, mucous membranes, and respiratory system. May be harmful by ingestion, skin absorption and inhalation | Eye: Irrigate immediately Skin: Water flush promptly Breathing: Respiratory support Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | 2,4-Dichlorophenol 2,4 Dichlorophenol | 120-83-2 | PID | NA NA | Groundwater Soil | inhalation, ingestion, skin, and/or eye contact, in | irritation to the eyes, skin, mucous membrane, nose, throat, respiratory system; ingestion: burning sensation, abdominal pain, tremor, weakness, convulsion, labored breathing, shock, or collapse | Eye: Irrigate immediately Skin: Water flush promptly Breathing: Respiratory support Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | 2,4-Dimethylphenol<br>2,4-Xylenol<br>m-Xylenol<br>1-Hydroxy-2,4-dimethylbenzene<br>2,4-Dimethylphenol<br>4-Hydroxy-1,3-dimethylbenzene<br>4,6-Dimethylphenol<br>1,3-Dimethyl-4-hydroxybenze | 105-67-9 | None | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, mucous membrane; headache, narcosis, coma; dermatitis; in animals: liver, kidney damage | Eye: Irrigate immediately<br>Skin: Water flush promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | 2,4-dinitrotoluene | 121-14-2 | PID | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | Irritation to the eyes, skin, respiratory system, Blue lips, or fingernails. Blue skin. Headache. Dizziness. Nausea. Confusion. Convulsions. Unconsciousness | Eye: Irrigate immediately<br>Skin: Soap wash<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | 2,6-Dinitrotoluene<br>2-Methyl-1,3-dinitrobenzene<br>2,6-DNT<br>2-methyl-1,3-dinitrobenzene<br>1-Methyl-2,6-dinitrobenzene<br>2,4-dinitromethylbenzene | 606-20-2 | PID | 1.5 mg/m3 | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | headache, weakness, nausea or dizziness, affect the nervous system causing fatigue, nausea, vomiting, drowsiness, and personality changes (irritability, anxiety, confusion and depression); shortness of breath and collapse. Can burn eyes and skin. | Eye: Irrigate immediately<br>Skin: Soap wash<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | 2-Butanone<br>Ethyl methyl ketone<br>MEK<br>Methyl acetone<br>Methyl ethyl ketone | 78-93-3 | PID | 200 ppm<br>3000 ppm | Soil<br>Groundwater<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose; headache; dizziness; vomiting; dermatitis | Eye: Irrigate immediately<br>Skin: Water wash immediately<br>Breathing: Fresh air<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | 2-Methylnaphthalene<br>β-methylnaphthalene | 91-57-6 | PID | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, ingestion or skin, absorption, eye contact | irritation to the skin, eyes, mucous membranes, and upper respiratory tract. It may also cause headaches, nausea, vomiting, diarrhea, anemia, jaundice, euphoria, dermatitis, visual disturbances, convulsions and comatose | Eye: Irrigate immediately<br>Skin: Water flush promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | 4,4'-DDD<br>Dichlorodiphenyldichloroethane<br>1,1'-(2,2-Dichloroethylidene)bis (4-chlorobenzene)<br>p,p'-DDD | 72-54-8 | None | NA<br>NA | Groundwater<br>Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin; paresthesia tongue, lips, face; tremor; anxiety, dizziness, confusion, malaise (vague feeling of discomfort), headache, lassitude (weakness, exhaustion); convulsions; paresis hands; vomiting; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Acenaphthene<br>1,2-Dihydroacenaphthylene<br>1,8-Ethylenenaphthalene<br>peri-Ethylenenaphthalene<br>Naphthyleneethylene<br>Tricyclododecapentaene | 83-32-9 | PID | NA<br>NA | Soil | inhalation, ingestion, skin, and/or eye contact, | irritation to the skin, eyes, mucous membranes, and upper respiratory tract; If ingested, it can cause vomiting | Eye: Irrigate immediately<br>Skin: Soap wash immediately, if redness or irritation develop, seek medical attention immediately<br>Breathing: Move to fresh air<br>Swallow: do not induce vomiting, seek medical attention immediately |
| 1.3.1 – 1.3.14 | Acenaphthylene<br>Cycopental(de)naphthalene,<br>Acenaphthalene | 208-96-8 | PID | NA<br>NA | Soil | inhalation, ingestion, skin, and/or eye contact | irritation to the skin, eyes, mucous membranes, and upper respiratory tract | Eye: Irrigate immediately, seek medical attention immediately,<br>Skin: Soap wash immediately, if redness or irritation develop, seek medical attention immediately<br>Breathing: Move to fresh air<br>Swallow: do not induce vomiting, seek medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Acetone<br>Dimethyl ketone<br>Ketone propane<br>2-Propanone<br>3-Hexen-2-one | 67-64-1 | PID | 1000 ppm<br>2500 ppm | Groundwater<br>Soil | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, nose, throat; headache, dizziness, central nervous system depression; dermatitis | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Aldrin<br>1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-endo-1,4-exo-5,8-dimethanonaphthalene<br>HHDN<br>Octalene | 309-00-2 | PID | 0.25 ppm<br>5 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | headache, dizziness; nausea, vomiting, malaise (vague feeling of discomfort); myoclonic jerks of limbs; colonic, tonic convulsions; coma; hematuria (blood in the urine), azotemia; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Alpha-BHC<br>alpha-Hexachlorocyclohexane<br>-alpha,2-alpha,3-beta,4-alpha,5-beta,6-beta-Hexachlorocyclohexane<br>alpha-1,2,3,4,5,6-Hexachlorocyclohexane<br>alpha-Benzenehexachloride<br>α-1,2,3,4,5,6-hexachlorocyclohexane<br>α-HCH<br>α-Benzenehexachloride<br>alpha-hexacloran(e)<br>alpha-Lindane<br>Alpha Hexachlorocyclohexane | 319-84-6 | PID | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, mucous membrane possible carcinogenic, effects to liver, blood, and central nervous system | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Alpha-Chlordane<br>Alpha Chlordane<br>a-Chlordane | 5103-71-9 | None | 0.5 $mg/m^3$<br>100 $mg/m^3$ | Groundwater<br>Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | Blurred vision; confusion; ataxia, delirium; cough; abdominal pain, nausea, vomiting, diarrhea; irritability, tremor, convulsions; anuria | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Aluminum | 7429-90-5 | None | 0.5 mg/m3<br>50 mg/m3 | Soil | inhalation, skin, and/or eye contact | irritation to the eyes, skin, respiratory system | Eye: Irrigate immediately<br>Breathing: Fresh air |
| 1.3.1 – 1.3.14 | Anthracene | 120-12-7 | PID | 0.2 $mg/m^3$<br>80 $mg/m^3$ (Coal Pitch Tar) | Soil | inhalation, skin, or eye contact, ingestion | irritation to the skin, eyes, mucous membranes, and upper respiratory tract, abdominal pain if ingested. | Eye: Irrigate immediately, seek medical attention immediately,<br>Skin: Soap wash immediately,<br>Breathing: Move to fresh air, refer to medical attention.<br>Swallow: refer to medical attention |
| 1.3.1 – 1.3.14 | Aroclor 1254 | 11097-69-1 | None | 0.5 $mg/m^3$<br>5 $mg/m^3$ | Groundwater<br>Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, chloracne | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Aroclor 1260 | 11096-82-5 | None | 0.5 $mg/m^3$ 5 $mg/m^3$ | Groundwater Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, chloracne | Eye: Irrigate immediately Skin: Soap wash immediately Breathing: Respiratory support Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Aroclor 1268 | 11100-14-4 | None | 0.5 $mg/m^3$ 5 $mg/m^3$ | Groundwater Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, chloracne | Eye: Irrigate immediately Skin: Soap wash immediately Breathing: Respiratory support Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Arsenic | NA | None | 0.5 $mg/m^3$ NA | Groundwater Soil | inhalation, ingestion, skin, and/or eye contact | irritation skin, dermatitis; resp distress; diarrhea; muscle tremor, convulsions; possible gastrointestinal tract | Eye: Irrigate immediately Skin: Soap wash immediately Breathing: Respiratory support Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Barium | 10022-31-8 | None | 0.5 $mg/m^3$ 50 $mg/m^3$ | Groundwater Soil | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, upper respiratory system; skin, burns; gastroenteritis; muscle spasm; slow pulse | Eye: Irrigate immediately Skin: Water flush immediately Breathing: Respiratory support Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Benzene<br>Benzol<br>Phenyl hydride<br>Alkyl benzene isomers | 71-43-2 | PID | 3.19 $mg/m^3$<br>1,595 $mg/mg^3$ | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, respiratory system; dizziness; headache, nausea, staggered gait; lassitude (weakness, exhaustion) [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Benzo(a)anthracene<br>Benzanthracene<br>Benzanthrene<br>1,2-Benzanthracene<br>Benzo[b]phenanthrene<br>Tetraphene | 56-55-3 | PID | 0.2 $mg/m^3$<br>80 $mg/m^3$ (Coal Pitch Tar) | Groundwater<br>Soil | inhalation, skin, or eye contact, ingestion | dermatitis, bronchitis, [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Benzo(a)pyrene | 50-32-8 | PID | 0.2 $mg/m^3$<br>80 $mg/m^3$ (Coal Pitch Tar) | Soil | inhalation, skin, or eye contact, ingestion | dermatitis, bronchitis, [potential occupational carcinogen] | Eye: Irrigate immediately, seek medical attention<br>Skin: Soap wash immediately.<br>Breathing: move to fresh air.<br>Swallow: Induce vomiting if conscious, seek medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Benzo(b)fluoranthene | 205-99-2 | PID | 0.2 $mg/m^3$ 80 $mg/m^3$ (Coal Pitch Tar) | Soil | inhalation, skin, or eye contact, ingestion | irritation to eyes and skin, respiratory irritation (dizziness, weakness, fatigue, nausea, headache) | Eye: Irrigate immediately, refer to medical attention<br>Skin: Soap wash immediately<br>Breathing: move to fresh air<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Benzo(g,h,i)fluoranthene<br>Benzo[ghi]fluoranthene<br>203-12-3<br>BENZO(GHI)FLUORANTHENE<br>pentacyclo[8.8.0.02,7.03,17.013,18]octadeca-1(10),2(7),3,5,8,11,13(18),14,16-nonaene<br>2,13-Benzofuranthene<br>2,13-Benzofluoranthene | 203-12-3 | NA | NA<br>NA | Soil | inhalation, skin, or eye contact, ingestion | dermatitis, bronchitis, [potential occupational carcinogen] | Eye: Irrigate immediately, seek medical attention<br>Skin: Soap wash immediately.<br>Breathing: move to fresh air.<br>Swallow: Induce vomiting if conscious, seek medical attention immediately |
| 1.3.1 – 1.3.14 | Benzo(g,h,i)perylene<br>Benzo(ghi)perylene | 191-24-2 | PID | 0.2 $mg/m^3$ 80 $mg/m^3$ (Coal Pitch Tar) | Soil | inhalation, skin, or eye contact, ingestion | irritation to eyes and skin, respiratory irritation (dizziness, weakness, fatigue, nausea, headache) | Eye: Irrigate immediately, refer to medical attention<br>Skin: Soap wash immediately<br>Breathing: move to fresh air<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Benzo(k)fluoranthene | 207-08-9 | PID | 0.2 $mg/m^3$ 80 $mg/m^3$ (Coal Pitch Tar) | Soil | inhalation, skin, or eye contact, ingestion | irritation to eyes and skin, respiratory irritation (dizziness, weakness, fatigue, nausea, headache) | Eye: Irrigate immediately, refer to medical attention Skin: Soap wash immediately Breathing: move to fresh air Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Beryllium | 7440-41-7 | None | 0.002 $mg/m^3$ 4 $mg/m^3$ | Soil | inhalation, skin, and/or eye contact | berylliosis (chronic exposure): anorexia, weight loss, lassitude (weakness, exhaustion), chest pain, cough, clubbing of fingers, cyanosis, pulmonary insufficiency; irritation to the eyes; dermatitis; [potential occupational carcinogen] | Eye: Irrigate immediately Breathing: Fresh air |
| 1.3.1 – 1.3.14 | Beta BHC Beta Hexachlorocyclohexane 1-alpha,2-beta,3-alpha,4-beta,5-alpha,6-beta-Hexachlorocyclohexane beta-1,2,3,4,5,6-Hexachlorocyclohexane Beta-BHC | 319-85-7 | None | NA NA | Groundwater Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin; paresthesia tongue, lips, face; tremor; anxiety, dizziness, confusion, malaise (vague feeling of discomfort), headache, lassitude (weakness, exhaustion); convulsions; paresis hands; vomiting; [potential occupational carcinogen] | Eye: Irrigate immediately Skin: Soap wash promptly Breathing: Respiratory support Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Beta-Endosulfan<br>Beta Endosulfan<br>Endosulfan II (beta)<br>Endosulfan II | 33213-65-9 | None | None | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation skin; nausea, confusion, agitation, flushing, dry mouth, tremor, convulsions, headache; in animals: kidney, liver injury; decreased testis weight |
| 1.3.1 – 1.3.14 | Bis(2-ethylhexyl)phthalate<br>Bis(2-Ethylhexyl) Phthalate<br>Di-sec octyl phthalate<br>DEHP<br>Di(2-ethylhexyl)phthalate<br>Octyl phthalate<br>bis(2-ethylexyl)phthalate | 117-81-7 | None | 5 $mg/m^3$<br>5000 $mg/m^3$ | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, mucous membrane; in animals: liver damage; teratogenic effects; [potential occupational carcinogen | Eye: Irrigate immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Cadmium | 7440-43-9 | None | 0.005 $mg/m^3$<br>9 $mg/m^3$ | Soil | inhalation, ingestion | pulmonary edema, dyspnea (breathing difficulty), cough, chest tightness, substernal (occurring beneath the sternum) pain; headache; chills, muscle aches; nausea, vomiting, diarrhea; anosmia (loss of the sense of smell), emphysema, proteinuria, mild anemia; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Calcium | 7440-70-2 | None | NA | Groundwater<br>Soil | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, upper resp tract; ulcer, perforation nasal septum; pneumonitis; dermatitis | Eye: Irrigate immediately<br>Skin: Water flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Caprolactam<br>Aminocaproic lactam<br>epsilon-Caprolactam<br>Hexahydro-2H-azepin-2-one<br>2-Oxohexamethyleneimine | 105-60-2 | PID | None<br>None | Soil<br>Groundwater<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation skin, eyes, respiratory system; epistaxis (nosebleed); dermatitis, skin, sensitization; asthma; irritability, confusion, dizziness, headache; abdominal cramps, diarrhea, nausea, vomiting; liver, kidney injury | Eye: Irrigate immediately (liquid)<br>Skin: Water flush immediately (liquid)<br>Breathing: Respiratory support |
| 1.3.1 – 1.3.14 | Carbazole<br>9-azafluorene<br>Dibenzopyrrole<br>Diphenylenimine<br>diphenyleneimide | 86-74-8 | None | NA<br>NA | Soil | inhalation, skin absorption (liquid), skin, and/or eye contact | irritation to eyes and skin, respiratory irritation | Eye: Irrigate immediately, refer to medical attention<br>Skin: Soap wash immediately<br>Breathing: move to fresh air<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Carbon disulfide | 75-15-0 | PID | 20 ppm<br>500 ppm | Soil<br>Groundwater<br>Vapor | inhalation, skin, or eye contact, ingestion | irritation to the eyes, skin, respiratory system | Eye: Irrigate immediately (liquid)<br>Skin: Water flush immediately (liquid)<br>Breathing: Respiratory support |
| 1.3.1 – 1.3.14 | Carbon tetrachloride<br>Carbon chloride<br>Carbon tet<br>Freon® 10<br>Halon® 104<br>Tetrachloromethane | 56-23-5 | PID | 10 ppm<br>200 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin; central nervous system depression; nausea, vomiting; liver, kidney injury; drowsiness, dizziness, incoordination; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Chlorobenzene<br>benzene chloride<br>monochlorobenzene<br>Phenyl chloride<br>Chlorobenzol<br>MCB | 108-90-7 | PID | 75 ppm<br>1000 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin, or eye contact, ingestion | irritation to the eyes, skin, nose; drowsiness, incoordination; central nervous system depression; in animals: liver, lung, kidney injury | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Chloroform<br>Methane trichloride<br>Trichloromethane<br>Chloro-3-methyl phenol | 67-66-3 | None | 50 ppm<br>500 ppm | Groundwater<br>Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin; dizziness, mental dullness, nausea, confusion; headache, lassitude (weakness, exhaustion); anesthesia; enlarged liver; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Chromium<br>Total Chromium<br>Chromium, Total | 7440-47-3 | None | 1.0 $mg/m^3$<br>250 $mg/m^3$ | Groundwater<br>Soil | inhalation<br>absorption<br>ingestion | irritation to eye, skin, and respiratory | Eye: Irrigate immediately<br>Skin: Soap wash<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Chrysene<br>Benzo[a]phenanthrene<br>1,2-Benzphenanthrene | 218-01-9 | PID | 0.2 $mg/m^3$<br>80 $mg/m^3$ (Coal Pitch Tar) | Groundwater<br>Soil | inhalation, absorption, ingestion, consumption | irritation to eye, skin, and respiratory, gastrointestinal irritation nausea, vomit, diarrhea [potential occupational carcinogen] | Eyes: Irrigate immediately<br>Skin: Soap wash promptly.<br>Breath: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | cis-1,2-Dichloroethylene<br>cis-1,2-Dichloroethene | 156-59-2 | NA | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | Irritant to eyes, skin, mucous membranes, and respiratory system. May be harmful by ingestion, skin absorption and inhalation | Eye: Irrigate immediately<br>Skin: Water flush promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Cobalt | 7440-48-4 | None | 0.1$mg/m^3$<br>20 $mg/m^3$ | Soil | inhalation, ingestion, skin, and/or eye contact | Cough, dyspnea (breathing difficulty), wheezing, decreased pulmonary function; weight loss; dermatitis; diffuse nodular fibrosis; resp hypersensitivity, asthma | Eye: Irrigate immediately<br>Skin: Soap wash<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Copper | 7440-50-8 | None | 1.0 $mg/m^3$ 100 $mg/m^3$ | Groundwater Soil | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, nose, metallic taste; dermatitis; anemia | Eye: Irrigate immediately Skin: Soap wash promptly Breathing: Respiratory support Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Cumene Cumol Isopropylbenzene 2-Phenyl propane 1-methylethy lbenzene Isopropyl Benzene | 98-82-8 | PID | 50 ppm 900 ppm | Groundwater Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, mucous membrane; dermatitis; headache, narcosis, coma | Eye: Irrigate immediately Skin: Water flush promptly Breathing: Respiratory support Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Cyanide | 57-12-5 | None | 5 $mg/m^3$ 25 $mg/m^3$ | Groundwater Soil | inhalation, ingestion, skin, and/or eye contact | Exposure to cyanide can cause weakness, headaches, confusion, dizziness, fatigue, anxiety, sleepiness, nausea and vomiting. Breathing can speed up then become slow and gasping. Coma, and convulsions also occur. If copious amounts of cyanide have been absorbed by the body, the person usually collapses, and death can occur very quickly. Long-term exposure to lower levels of cyanide can cause skin, and nose irritation, itching, rashes and thyroid changes. | Eye: Irrigate immediately Skin: Soap wash Breathing: Respiratory support Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Cyclohexane Benzene hexahydride Hexahydrobenzene Hexamethylene Hexanaphthene | 110-82-7 | PID | 300 ppm 1300 ppm | Soil Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, respiratory system; drowsiness; dermatitis; narcosis, coma | Eye: Irrigate immediately Skin: Water flush promptly Breathing: Respiratory support Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | DDE<br>4,4-DDE<br>4,4′-DDE<br>1,1-bis-(4-chlorophenyl)-2,2-dichloroethene<br>Dichlorodiphenyldichloroethylene<br>p,p'-DDE | 72-55-9 | None | NA<br>NA | Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | Oral ingestion of food is the primary source of exposure for the general population. Acute and chronic ingestion may cause nausea, vomiting, diarrhea, stomach pain, headache, dizziness, disorientation, tingling, sensation, kidney damage, liver damage, convulsions, coma, and death. 4,4' DDE may cross the placenta and can be excreted in breast milk | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | DDT<br>4,4-DDT<br>4,4′-DDT<br>p,p′-DDT<br>Dichlorodiphenyltrichloroethane<br>1,1,1-Trichloro-2,2-bis(p-chlorophenyl)ethane | 50-29-3 | None | 1 $mg/m^3$<br>500 $mg/m^3$ | Groundwater<br>Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin; paresthesia tongue, lips, face; tremor; anxiety, dizziness, confusion, malaise (vague feeling of discomfort), headache, lassitude (weakness, exhaustion); convulsions; paresis hands; vomiting; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Delta BHC<br>Delta-BHC<br>Delta-hexachlorocyclohexane<br>Delta Hexachlorocyclohexane | 319-86-8 | None | 0.5 $mg/m^3$<br>50 $mg/m^3$ | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat; headache; nausea; colonic convulsions; resp difficulty; cyanosis; aplastic anemia; muscle spasm; in animals: liver, kidney damage | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Dibenz(a,h)anthracene<br>Dibenzo(a,h)anthracene<br>Dibenzo[a,h]anthracene | 53-70-3 | PID | 0.2 $mg/m^3$<br>80 $mg/m^3$ (Coal Pitch Tar) | Groundwater<br>Soil | inhalation, absorption, ingestion, consumption | irritation to eyes, skin, respiratory, and digestion [potential occupational carcinogen] | Eyes: Irrigate immediately<br>Skin: Soap wash promptly.<br>Breath: Respiratory support<br>PID Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Dibenzofuran | 132-64-9 | None | NA<br>NA | Soil | inhalation, absorption | irritation to eyes, and skin | Eyes: Irrigate immediately<br>Skin: Soap wash promptly. |
| 1.3.1 – 1.3.14 | Dibutyl phthalate<br>Di-n-butyl phthalate<br>Butyl phthalate<br>n-Butyl phthalate<br>1,2-Benzenedicarboxylic acid dibutyl ester<br>o-Benzenedicarboxylic acid dibutyl ester<br>DBP<br>Palatinol C, Elaol<br>Dibutyl-1,2-benzene-dicarboxylate<br>Di-n-butylphthalate | 84-74-2 | None | 5 $mg/m^3$<br>4000 $mg/m^3$ | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, upper respiratory system, stomach | Eye: Irrigate immediately<br>Skin: Wash regularly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Dieldrin<br>HEOD<br>1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo exo-5,8-dimethanonaphthalene | 60-57-1 | PID | 0.25 $mg/m^3$<br>50 $mg/m^3$ | Groundwater<br>Soil<br>Water | inhalation, skin absorption, ingestion, skin, and/or eye contact | headache, dizziness; nausea, vomiting, malaise (vague feeling of discomfort), sweating; myoclonic limb jerks; colonic, tonic convulsions; coma; [potential occupational carcinogen]; in animals: liver, kidney damage | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Diesel<br>Fuel automotive diesel fuel oil No. 2 distillate diesoline diesel oil<br>diesel oil light<br>diesel oil No. 1-D<br>summer diesel | 68334-30-5 | PID | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat; burning sensation in chest; headache, nausea, lassitude (weakness, exhaustion), restlessness, incoordination, confusion, drowsiness; vomiting, diarrhea; dermatitis; chemical pneumonitis (aspiration liquid) | Eye: Irrigate immediately<br>Skin: Soap flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Endosulfan I<br>Alpha Endosulfan | 959-98-8 | None | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation skin; nausea, confusion, agitation, flushing, dry mouth, tremor, convulsions, headache; in animals: kidney, liver injury; decreased testis weight | Eye: Irrigate immediately<br>Skin: Soap flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Endosulfan sulfate<br>1,4,5,6,7,7-Hexachloro-5-norbornene-2,3-dimethanol, cyclic sulfate<br>6,7,8,9,10,10-hexachloro01,5,5a,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3,3-dioxide | 1031-07-8 | None | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | Hypersensitive to stimulation, sensation of prickling, tingling, or creeping on skin. Headache, dizziness, nausea, vomiting, incoordination, tremor, mental confusion, hyperexcitable state. In severe cases: convulsions, seizures, coma, and respiratory depression. | Eye: Irrigate immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Endrin<br>1,2,3,4,10,10-Hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo,endo-5,8-dimethanonaphthalene;<br>Hexadrin | 72-20-8 | None | 0.1 $mg/m^3$<br>2 $mg/m^3$ | Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | epileptiform convulsions; stupor, headache, dizziness; abdominal discomfort, nausea, vomiting; insomnia; aggressiveness, confusion; drowsiness, lassitude (weakness, exhaustion); anorexia; in animals: liver damage | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Ethyl benzene<br>Ethylbenzene<br>Ethylbenzol<br>Phenylethane | 100-41-4 | PID | 435 $mg/m^3$<br>3,472 $mg/m^3$ | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, mucous membrane; headache; dermatitis; narcosis, coma | Eye: Irrigate immediately<br>Skin: Water flush promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Fluoranthene<br>Benzo(j,k)fluorene | 206-44-0 | PID | 0.2 $mg/m^3$<br>80 $mg/m^3$ (Coal Pitch Tar) | Groundwater<br>Soil | inhalation, skin, or eye contact, ingestion | irritation to eyes and skin, respiratory irritation (dizziness, weakness, fatigue, nausea, headache) | Eye: Irrigate immediately, refer to medical attention<br>Skin: Soap wash immediately<br>Breathing: move to fresh air<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Fluorene | 86-73-7 | PID | 0.2 $mg/m^3$ 80 $mg/m^3$ (Coal Pitch Tar) | Soil | inhalation, skin, or eye contact, ingestion | irritation to eyes and skin, respiratory irritation (dizziness, weakness, fatigue, nausea, headache) | Eye: Irrigate immediately, refer to medical attention Skin: Soap wash immediately Breathing: move to fresh air Swallow: Medical attention |
| 1.3.1 – 1.3.14 | Fuel Oil No. 2 | 68476-30-2 | PID | NA NA | Groundwater Soil Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat; burning sensation in chest; headache, nausea, lassitude (weakness, exhaustion), restlessness, incoordination, confusion, drowsiness; vomiting, diarrhea; dermatitis; chemical pneumonitis (aspiration liquid) | Eye: Irrigate immediately Skin: Soap flush immediately Breathing: Respiratory support Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | gamma-Chlordane Gamma Chlordane y-Chlordane | 5566-34-7 | None | 0.5 $mg/m^3$ 100 $mg/m^3$ | Groundwater Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | Blurred vision; confusion; ataxia, delirium; cough; abdominal pain, nausea, vomiting, diarrhea; irritability, tremor, convulsions; anuria | Eye: Irrigate immediately Skin: Soap wash immediately Breathing: Respiratory support Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Gasoline | 8006-61-9 | PID | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, mucous membrane; dermatitis; headache, lassitude (weakness, exhaustion), blurred vision, dizziness, slurred speech, confusion, convulsions; chemical pneumonitis (aspiration liquid) | Eye: Irrigate immediately<br>Skin: Soap flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Helium | 7440-59-7 | Helium Detector | NA<br>NA | NA | inhalation | dizziness, headache, and nausea | Breathing: Respiratory support |
| 1.3.1 – 1.3.14 | Heptachlor | 76-44-8 | None | 0.5 $mg/m^3$<br>35 $mg/m^3$ | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | In animals: tremor, convulsions; liver damage; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Hexachlorobenzene<br>Perchlorobenzene<br>Pentachlorophenylchloride<br>Benzene hexachloride<br>Phenyl perchloryl<br>HCB<br>BHC | 118-74-1 | NA | NA<br>NA | Groundwater<br>Soil | inhalation, ingestion, skin, and/or eye contact | Irritating to eyes, skin, and mucous membranes. Prolonged periods of ingestion may cause cutaneous porphyria | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Hexachlorocyclopentadiene | 77-47-4 | PID | NA<br>NA | Groundwater<br>Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | Irritation eyes, skin, respiratory system; eye, skin, burns; lacrimation (discharge of tears); sneezing, cough, dyspnea (breathing difficulty), salivation, pulmonary edema; nausea, vomiting, diarrhea; In Animals: liver, kidney injury | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Hexachloroethane<br>Carbon hexachloride<br>Ethane hexachloride<br>Perchloroethane | 67-72-1 | PID | 1 ppm\<br>300 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, mucous membrane; In Animals: kidney damage; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Hexavalent Chromium<br>Chromium VI<br>Chromium, Hexavalent | 18540-29-9 | None | 1.0 $mg/m^3$<br>250 $mg/m^3$ | Groundwater<br>Soil | inhalation<br>absorption<br>ingestion | irritation to eye, skin, and respiratory | Eye: Irrigate immediately<br>Skin: Soap wash<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Indeno(1,2,3-cd)pyrene<br>Indeno(1,2,3-c,d)Pyrene<br>Indeno[1,2,3-cd]Pyrene | 193-39-5 | None | 0.2 $mg/m^3$<br>80 $mg/m^3$ (Coal Pitch Tar) | Groundwater<br>Soil | inhalation, absorption, ingestion, consumption | irritation to eyes, skin, respiratory, and digestion [potential occupational carcinogen] | Eyes: Irrigate immediately<br>Skin: Soap wash promptly.<br>Breath: Respiratory support<br>Swallow: Medical attention immediately, wash mouth with water |
| 1.3.1 – 1.3.14 | Iron | 7439-89-6 | None | 10 $mg/m^3$<br>NA | Groundwater<br>Soil | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, mucous membrane; abdominal pain, diarrhea, vomiting | Eye: Irrigate immediately<br>Skin: Soap wash<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Isophorone<br>1,1,3-Trimethyl-3-cyclohexene-5-one<br>Isoforone<br>Isoacetophorone | 78-59-1 | None | 25 ppm<br>200 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, respiratory system | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Lead | 7439-92-1 | None | 0.050 $mg/m^3$ 100 $mg/m^3$ | Groundwater Soil | inhalation, ingestion, skin, and/or eye contact | lassitude (weakness, exhaustion), insomnia; facial pallor; anorexia, weight loss, malnutrition; constipation, abdominal pain, colic; anemia; gingival lead line; tremor; paralysis wrist, ankles; encephalopathy; kidney disease; irritation to the eyes; hypertension | Eye: Irrigate immediately Skin: Soap flush promptly Breathing: Respiratory support Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Lindane Gamma BHC HCH ã-Hexachlorocyclohexane gamma isomer of 1,2,3,4,5,6-Hexachlorocyclohexane gamma-Hexachlorocyclohexane | 58-89-9 | None | 0.5 $mg/m^3$ 50 $mg/m^3$ | Groundwater Soil Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat; headache; nausea; colonic convulsions; resp difficulty; cyanosis; aplastic anemia; muscle spasm; in animals: liver, kidney damage | Eye: Irrigate immediately Skin: Soap wash promptly Breathing: Respiratory support Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Magnesium | 7439-95-4 | None | 15 $mg/m^3$ NA | Soil | inhalation, skin, and/or eye contact | irritation to the eyes, skin, respiratory system; cough | Eye: Irrigate immediately Breathing: Fresh air |
| 1.3.1 – 1.3.14 | Manganese | 7439-96-5 | None | 5 $mg/m^3$ 500 $mg/m^3$ | Groundwater Soil | inhalation, ingestion | aerosol is irritating to the respiratory tract | Eye: Irrigate immediately Skin: Soap flush promptly Breathing: Respiratory support Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | m-Cresol<br>meta-Cresol<br>3-Cresol<br>m-Cresylic acid<br>1-Hydroxy-3-methylbenzene<br>3-Hydroxytoluene<br>3-Methylphenol<br>3-Methylphenols | 108-39-4 | PID | 5 ppm<br>250 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, mucous membrane; central nervous system effects: confusion, depression, resp failure; dyspnea (breathing difficulty), irregular rapid respiration, weak pulse; eye, skin, burns; dermatitis; lung, liver, kidney, pancreas damage | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Mercury | 7439-97-6 | None | 0.1 $mg/m^3$<br>10 $mg/m^3$ | Groundwater<br>Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin; cough, chest pain, dyspnea (breathing difficulty), bronchitis, pneumonitis; tremor, insomnia, irritability, headache, lassitude (weakness, exhaustion); stomatitis, salivation; gastrointestinal disturbance, anorexia, weight loss; proteinuria | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Methyl chloroform<br>Chlorothene<br>1,1,1-Trichloroethane<br>1,1,1-Trichloroethane-(stabilized)<br>1,1,1-TCA<br>1,1,1-Trichbroethane<br>TCA | 71-55-6 | PID | 350 ppm<br>700 ppm | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin; headache, lassitude (weakness, exhaustion), central nervous system depression, poor equilibrium; dermatitis; cardiac arrhythmias; liver damage | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Methyl *tert*-butyl ether<br>MTBE<br>Methyl tertiary-butyl ether<br>Methyl t-butyl ether<br>tert-Butyl methyl ether<br>tBME<br>tert-BuOMe<br>Methyl tert butyl ether | 1634-04-4 | PID | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat; burning sensation in chest; headache, nausea, lassitude (weakness, exhaustion), restlessness, incoordination, confusion, drowsiness; vomiting, diarrhea; dermatitis; chemical pneumonitis (aspiration liquid) | Eye: Irrigate immediately<br>Skin: Soap flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Methylcyclohexane<br>Methyl cyclohexane<br>Methylcyclohexane<br>Hexahydrotoluene<br>Cyclohexylmethane<br>Toluene hexahydride | 108-87-2 | PID | 500 ppm<br>1200 ppm | Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat; dizziness, drowsiness; in animals: narcosis | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Methylene Chloride<br>Dichloromethane<br>Methylene dichloride | 75-09-2 | PID | 25 ppm<br>2300 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin; lassitude (weakness, exhaustion), drowsiness, dizziness; numb, tingle limbs; nausea; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | m-Xylenes<br>1,3-Dimethylbenzene<br>m-Xylol<br>Metaxylene | 108-38-3<br><br>179601-23-1 | PID | 100 ppm<br>900 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination, staggering gait; corneal vacuolization; nausea, vomiting, abdominal pain; dermatitis | Eye: Irrigate immediately<br>Skin: Soap flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Naphthalene<br>Naphthalin<br>Tar camphor<br>White tar | 91-20-3 | PID | 50 $mg/m^3$<br>250 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes; headache, confusion, excitement, malaise (vague feeling of discomfort); nausea, vomiting, abdominal pain; irritation bladder; profuse sweating; hematuria (blood in the urine); dermatitis, optical neuritis | Eye: Irrigate immediately<br>Skin: Molten flush immediately/solid-liquid soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | n-Butylbenzene<br>Butylbenzene<br>1-phenylbutane | 104-51-8 | PID | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin; dry nose, throat; headache; low blood pressure, tachycardia, abnormal cardiovascular system stress; central nervous system, hematopoietic depression; metallic taste; liver, kidney injury | Eye: Irrigate immediately<br>Skin: Water flush promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Nickel | 7440-02-0 | None | NA<br>10 mg/$m^3$ | Groundwater<br>Soil | ion, ingestion, skin, and/or eye contact | sensitization dermatitis, allergic asthma, pneumonitis; [potential occupational carcinogen] | Skin: Water flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Non-Flammable Gas Mixture CALGAS (Equipment Calibration Gas :<br>Oxygen<br>Methane<br>Hydrogen Sulfide<br>Carbon Monoxide<br>Nitrogen | <br><br>7782-44-7<br>74-82-8<br>7783-08-4<br>830-08-0<br>7727-37-9 | Multi-Gas PID | <br><br>NA/NA<br>NA/NA<br>10/100 ppm<br>50/1200 ppm<br>NA/NA | NA | inhalation | dizziness, headache, and nausea | Breathing: Respiratory support |
| 1.3.1 – 1.3.14 | Non-Flammable Gas Mixture CALGAS (Equipment Calibration Gas :<br>Oxygen<br>Isobutylene<br>Nitrogen | <br><br>7782-44-7<br>115-11-7<br>7727-37-9 | PID | <br><br>NA/NA<br>NA/NA<br>NA/NA | NA | inhalation | dizziness, headache, and nausea | Breathing: Respiratory support |
| 1.3.1 – 1.3.14 | n-Propylbenzene<br>Isocumene<br>Propylbenzene<br>1-Phenylpropane<br>1-Propylbenzene<br>Phenylpropane<br>Propylbenzene-n | 103-65-1 | PID | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin; dry nose, throat; headache; low blood pressure, tachycardia, abnormal cardiovascular system stress; central nervous system, hematopoietic depression; metallic taste; liver, kidney injury | Eye: Irrigate immediately<br>Skin: Water flush promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | o-Cresol<br>ortho-Cresol<br>2-Cresol<br>o-Cresylic acid<br>1-Hydroxy-2-methylbenzene<br>2-Hydroxytoluene<br>2-Methyl phenol<br>2-Methylphenol | 95-48-7 | PID | 5 ppm<br>250 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, mucous membrane; central nervous system effects: confusion, depression, resp failure; dyspnea (breathing difficulty), irregular rapid respiration, weak pulse; eye, skin, burns; dermatitis; lung, liver, kidney, pancreas damage | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | o-Xylenes<br>1,2-Dimethylbenzene<br>ortho-Xylene<br>o-Xylol | 95-47-6<br>179601-23-1 | PID | 100 ppm<br>900 ppm | Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination, staggering gait; corneal vacuolization; nausea, vomiting, abdominal pain; dermatitis | Eye: Irrigate immediately<br>Skin: Soap flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | p-Cresol<br>para-Cresol<br>4-Cresol<br>p-Cresylic acid<br>1-Hydroxy-4-methylbenzene<br>4-Hydroxytoluene<br>4-Methylphenol<br>4-Methylphenols | 106-44-5 | PID | 5 ppm<br>250 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, mucous membrane; central nervous system effects: confusion, depression, resp failure; dyspnea (breathing difficulty), irregular rapid respiration, weak pulse; eye, skin, burns; dermatitis; lung, liver, kidney, pancreas damage | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediatelym |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Pentachlorophenol<br>PCP;<br>Penta;<br>2,3,4,5,6-Pentachlorophenol | 87-86-5 | PID | 0.5 $mg/m^3$<br>2.5 $mg/m^3$ | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, nose, throat; sneezing, cough; lassitude (weakness, exhaustion), anorexia, weight loss; sweating; headache, dizziness; nausea, vomiting; dyspnea (breathing difficulty), chest pain; high fever; dermatitis | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Phenanthrene | 85-01-8 | PID | 0.2 $mg/m^3$<br>80 $mg/m^3$ (Coal Pitch Tar) | Groundwater<br>Soil | inhalation, skin, or eye contact, ingestion | irritation to eyes and skin, respiratory irritation (dizziness, weakness, fatigue, nausea, headache) | Eye: Irrigate immediately, refer to medical attention<br>Skin: Soap wash immediately<br>Breathing: move to fresh air<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Phenol<br>Carbolic acid<br>Hydroxybenzene,<br>Monohydroxybenzene<br>Phenyl alcohol<br>Phenyl hydroxide | 108-95-2 | PID | 5 ppm<br>250 ppm | Groundwater<br>Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, nose, throat; anorexia, weight loss; lassitude (weakness, exhaustion), muscle ache, pain; dark urine, skin, burns; dermatitis; tremor, convulsions, twitching | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Potassium | 7440-09-7 | None | NA<br>NA | Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact inhalation, ingestion, skin, and/or eye contact | eye: Causes eye burns. Skin: Causes skin, burns. Reacts with moisture in the skin, to form potassium hydroxide and hydrogen with heat.<br>ingestion: Causes gastrointestinal tract burns.<br>inhalation: May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. Causes chemical burns to the respiratory tract.<br>inhalation may be fatal because of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. | Eyes: Get medical aid immediately<br>Skin: Get medical aid immediately. Immediately flush skin with water for at least 15 minutes while removing contaminated clothing and shoes.<br>Ingestion: If victim is conscious and alert, give 2-4 full cups of milk or water. Get medical aid immediately.<br>inhalation: Get medical aid immediately. |
| 1.3.1 – 1.3.14 | p-Xylenes<br>1,4-Dimethylbenzene<br>para-Xylene<br>p-Xylol | 106-42-3 | PID | 100 ppm<br>900 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination, staggering gait; corneal vacuolization; nausea, vomiting, abdominal pain; dermatitis | Eye: Irrigate immediately<br>Skin: Soap flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Pyrene<br>benzo[def]phenanthrene | 129-00-0 | PID | 0.2 $mg/m^3$<br>80 $mg/m^3$ (Coal Pitch Tar) | Groundwater<br>Soil | inhalation, skin, or eye contact, ingestion | irritation to eyes and skin, respiratory irritation (dizziness, weakness, fatigue, nausea, headache) | Eye: Irrigate immediately, refer to medical attention<br>Skin: Soap wash immediately<br>Breathing: move to fresh air<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | sec-Butylbenzene<br>2-phenylbutane | 135-98-8 | PID | 10 ppm<br>100 ppm | Groundwater<br>Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, nose, throat.<br>inhalation: nausea or vomiting | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Selenium | 7782-49-2 | None | 1 $mg/m^3$<br>0.2 $mg/m^3$ | Soil | inhalation, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat; visual disturbance; headache; chills, fever; dyspnea (breathing difficulty), bronchitis; metallic taste, garlic breath, gastrointestinal disturbance; dermatitis; eye, skin, burns; in animals: anemia; liver necrosis, cirrhosis; kidney, spleen damage | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Semi Volatile Organic Compounds<br>SVOC | NA | PID | NA | Soil<br>Groundwater | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, throat; dizziness, headache, nausea, dyspnea (breathing difficulty); liver, kidney disturbance; pneumonitis; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Silver | 7440-22-4 | None | 0.01 mg/$m^3$<br>10 mg/$m^3$ | Soil | inhalation, ingestion, skin, and/or eye contact | blue-gray eyes, nasal septum, throat, skin; irritation, ulceration skin; gastrointestinal disturbance | Eye: Irrigate immediately<br>Skin: Water flush<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Silvex<br>2-(2,4,5-Trichlorophenoxy)propionic acid<br>Fenoprop<br>2,4,5-TP Acid<br>2,4,5-TP | 93-72-1 | PID | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, nose, respiratory system; headache, lassitude (weakness, exhaustion), dizziness, confusion, malaise (vague feeling of discomfort), drowsiness, unsteady gait; narcosis; defatting dermatitis; liver injury; reproductive effects | Eye: Irrigate immediately<br>Skin: Water flush<br>Breathing: Respiratory support<br>Swallow: Medical attention |
| 1.3.1 – 1.3.14 | Sodium | 7440-23-5 | None | NA<br>NA | Groundwater<br>Soil | ion, ingestion, skin, and/or eye contact | sensitization dermatitis, allergic asthma, pneumonitis; [potential occupational carcinogen] | Skin: Water flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | tert-Butylbenzene<br>*t*-Butylbenzene<br>2-Methyl-2-phenylpropane<br>Pseudobutylbenzene | 98-06-6 | PID | 10 ppm<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | eye, skin, irritation; dry nose, throat; headaches; low blood pressure, tachycardia; abnormal cardiovascular system; central nervous system depression; hematopoietic depression | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Tetrachloroethylene<br>Perchlorethylene<br>Perchloroethylene<br>PCE<br>Perk<br>Tetrachlorethylene<br>Tetrachloroethene | 127-18-4 | PID | 100 ppm<br>150 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat, respiratory system; nausea; flush face, neck; dizziness, incoordination; headache, drowsiness; skin, erythema (skin, redness); liver damage; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Toluene<br>Methyl benzene<br>Methyl benzol<br>Phenyl methane<br>Toluol | 108-88-3 | PID | 200 ppm<br>500 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, nose; lassitude (weakness, exhaustion), confusion, euphoria, dizziness, headache; dilated pupils, lacrimation (discharge of tears); anxiety, muscle fatigue, paresthesia; dermatitis | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Total PCBs Chlorodiphenyl (42% chlorine)<br>Aroclor® 1242<br>PCB<br>Polychlorinated biphenyl | 53469-21-9 | None | 0.5 $mg/m^3$<br>5 $mg/m^3$ | Groundwater<br>Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, chloracne | Eye: Irrigate immediately<br>Skin: Soap wash immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Total Xylenes<br>Dimethylbenzene<br>Xylol | 1330-20-7 | PID | 100 ppm<br>900 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, nose, throat; dizziness, excitement, drowsiness, incoordination, staggering gait; corneal vacuolization; nausea, vomiting, abdominal pain; dermatitis | Eye: Irrigate immediately<br>Skin: Soap flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Trans-1,2-Dichloroethene<br>trans-1,2-Dichloroethylene<br>tDEC<br>trans-Acetylene dichloride | 156-60-5 | PID | 200 ppm<br>4000 ppm | Groundwater<br>Soil<br>Vapor | inhalation, ingestion, skin, and/or eye contact | Irritant to eyes, skin, mucous membranes, and respiratory system. May be harmful by ingestion, skin absorption and inhalation | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Trichloroethylene<br>Trichloroetheneylenes<br>Ethylene trichloride<br>TCE<br>Trichloroethene<br>Trilene | 79-01-6 | PID | 100 ppm<br>1000 ppm | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin; headache, visual disturbance, lassitude (weakness, exhaustion), dizziness, tremor, drowsiness, nausea, vomiting; dermatitis; cardiac arrhythmias, paresthesia; liver injury; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Trivalent Chromium<br>Chromium III<br>Chromium, Trivalent | NA | None | 1.0 $mg/m^3$<br>250 $mg/m^3$ | Groundwater<br>Soil | inhalation<br>absorption<br>ingestion | irritation to eye, skin, and respiratory | Eye: Irrigate immediately<br>Skin: Soap wash<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Vanadium | 7440-62-2 | None | 0.1 mg/m3<br>15 mg/m3 | Groundwater<br>Soil | inhalation, skin absorption, ingestion, skin, and/or eye contact | nausea, diarrhea, abdominal pain, vomiting; ptosis, strabismus; peri neuritis, tremor; retrosternal (occurring behind the sternum) tightness, chest pain, pulmonary edema; convulsions, chorea, psychosis; liver, kidney damage; alopecia; paresthesia legs | Eye: Irrigate immediately<br>Skin: Water flush promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Vinyl Chloride<br>Chloroethene<br>Chloroethylen<br>Ethylene monochloride<br>Monochloroethene<br>Monochloroethylene<br>VC<br><br>Vinyl chloride monomer (VCM) | 75-01-4 | PID | 1 ppm<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, skin, and/or eye contact (liquid) | lassitude (weakness, exhaustion); abdominal pain, gastrointestinal bleeding; enlarged liver; pallor or cyanosis of extremities; liquid: frostbite; [potential occupational carcinogen] | Eye: Frostbite<br>Skin: Frostbite<br>Breathing: Respiratory support |
| 1.3.1 – 1.3.14 | Vinylidene chloride<br>1,1-DCE<br>1,1-Dichloroethene<br>1,1-Dichloroethylene<br>VDC<br>Vinylidene chloride monomer<br>Vinylidene dichloride | 75-35-4 | PID | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, throat; dizziness, headache, nausea, dyspnea (breathing difficulty); liver, kidney disturbance; pneumonitis; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap flush immediately<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

| Task | Contaminant | CAS Number | Monitoring Device | PEL/ IDLH | Source of Concentration on Site | Route of Exposure | Symptoms | First Aid |
|---|---|---|---|---|---|---|---|---|
| 1.3.1 – 1.3.14 | Volatile Organic Compounds VOCs | NA | PID | NA<br>NA | Groundwater<br>Soil<br>Vapor | inhalation, skin absorption, ingestion, skin, and/or eye contact | irritation to the eyes, skin, throat; dizziness, headache, nausea, dyspnea (breathing difficulty); liver, kidney disturbance; pneumonitis; [potential occupational carcinogen] | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |
| 1.3.1 – 1.3.14 | Zinc | 7440-62-2 | None | 15 $mg/m^3$<br>500 $mg/m^3$ | Groundwater<br>Soil | inhalation | chills, muscle ache, nausea, fever, dry throat, cough; lassitude (weakness, exhaustion); metallic taste; headache; blurred vision; low back pain; vomiting; malaise (vague feeling of discomfort); chest tightness; dyspnea (breathing difficulty), rales, decreased pulmonary function | Eye: Irrigate immediately<br>Skin: Soap wash promptly<br>Breathing: Respiratory support<br>Swallow: Medical attention immediately |

**EXPLANATION OF ABBREVIATIONS**

PID = Photoionization Detector
PEL = Permissible Exposure Limit (8-hour Time Weighted Average)
IDLH = Immediately Dangerous to Life and Health
ppm = part per million
$mg/m^3$ = milligrams per cubic meter
500 $mg/m^3$

# TABLE 3
# SUMMARY OF MONITORING EQUIPMENT

| Instrument | Operation Parameters |
|---|---|
| Photoionization Detector (PID) | **Hazard Monitored:** Many organic and some inorganic gases and vapors.<br>**Application:** Detects total concentration of many organic and some inorganic gases and vapors. Some identification of compounds is possible if more than one probe is measured.<br>**Detection Method:** Ionizes molecules using UV radiation; produces a current that is proportional to the number of ions.<br>**General Care/Maintenance:** Recharge or replace battery. Regularly clean lamp window. Regularly clean and maintain the instrument and accessories.<br>**Typical Operating Time:** 10 hours. 5 hours with strip chart recorder. |
| Oxygen Meter | **Hazard Monitored:** Oxygen ($O_2$).<br>**Application:** Measures the percentage of $O_2$ in the air.<br>**Detection Method:** Uses an electrochemical sensor to measure the partial pressure of $O_2$ in the air and converts the reading to $O_2$ concentration.<br>**General Care/Maintenance:** Replace detector cell according to manufacturer's recommendations. Recharge or replace batteries prior to explanation of the specified interval. If the ambient air is less than 0.5% C $O_2$, replace the detector cell frequently.<br>**Typical Operating Time:** 8 – 12 hours. |
| Additional equipment (if needed, based on site conditions) | |
| Combustible Gas Indicator (CGI) | **Hazard Monitored:** Combustible gases and vapors.<br>**Application:** Measures the concentration of combustible gas or vapor.<br>**Detection Method:** A filament, usually made of platinum, is heated by burning the combustible gas or vapor. The increase in heat is measured. Gases and vapors are ionized in a flame. A current is produced in proportion to the number of carbon atoms present.<br>**General Care/Maintenance:** Recharge or replace battery. Calibrate immediately before use.<br>**Typical Operating Time:** Can be used for as long as the battery lasts, or for the recommended interval between calibrations, whichever is less. |
| Flame Ionization Detector (FID) with Gas Chromatography Option *(i.e., Foxboro Organic Vapor Analyzer (OVA))* | **Hazard Monitored:** Many organic gases and vapors (approved areas only).<br>**Application:** In survey mode, detects the concentration of many organic gases and vapors. In gas chromatography (GC) mode, identifies and measures specific compounds. In survey mode, all the organic compounds are ionized and detected at the same time. In GC mode, volatile species are separated.<br>**General Care/Maintenance:** Recharge or replace battery. Monitor fuel and/or combustion air supply gauges. Perform routine maintenance as described in the manual. Check for leaks.<br>**Typical Operating Time:** 8 hours; 3 hours with strip chart recorder. |
| Potable Infrared (IR) Spectrophotometer | **Hazard Monitored:** Many gases and vapors.<br>**Application:** Measures concentration of many gases and vapors in air. Designed to quantify one or two component mixtures.<br>**Detection Method:** Passes different frequencies of IR through the sample. The frequencies absorbed are specific for each compound.<br>**General Care/Maintenance:** As specified by the manufacturer. |

| Instrument | Operation Parameters |
|---|---|
| Direct Reading Colorimetric Indicator Tube | **Hazard Monitored:** Specific gas and vapors.<br>**Application:** Measures concentration of specific gases and vapors.<br>**Detection Method:** The compound reacts with the indicator chemical in the tube, producing a stain whose length or color change is proportional to the compound's concentration.<br>**General Care/Maintenance:** Do not use a previously opened tube even if the indicator chemical is not stained. Check pump for leaks before and after use. Refrigerate before use to maintain a shelf life of about 2 years. Check expiration dates of tubes. Calibrate pump volume at least quarterly. Avoid rough handling which may cause channeling. |
| Aerosol Monitor | **Hazard Monitored:** Airborne particulate (dust, mist, fume) concentrations.<br>**Application:** Measures total concentration of semi-volatile organic compounds, PCBs, and metals.<br>**Detection Method:** Based on light-scattering properties of particulate matter. Using an internal pump, air sample is drawn into the sensing volume where near infrared light scattering is used to detect particles.<br>**General Care/Maintenance:** As specified by the mfr. Also, the instrument must be calibrated with particulates of a size and refractive index similar to those to be measured in the ambient air. |
| Monitox | **Hazard Monitored:** Gases and vapors.<br>**Application:** Measures specific gases and vapors.<br>**Detection Method:** Electrochemical sensor specific for the chemical species in question.<br>**General Care/Maintenance:** Moisten sponge before use; check the function switch; change the battery when needed. |
| Gamma Radiation Survey Instrument | **Hazard Monitored:** Gamma Radiation.<br>**Application:** Environmental radiation monitor.<br>**Detection Method:** Scintillation detector.<br>**General Care/Maintenance:** Must be calibrated annually at a specialized facility.<br>**Typical Operating Time:** Can be used for as long as the battery lasts, or for the recommended interval between calibrations, whichever is less. |

# TABLE 4
# INSTRUMENTATION ACTION LEVELS

| **Photoionization Detector Action Levels** | **Action Required** |
|---|---|
| Background to 5 parts per million (ppm)[1] | No respirator needed; no further action |
| >5ppm but </= 15 ppm at the perimeter of the work area | • Work temporarily halted and monitoring continues.<br>• If instantaneous readings decrease below 5 ppm above background, work activities will resume with continued monitoring |
| >5ppm but </= 25 ppm at the downwind perimeter of the hot zone | • Work activities will be halted.<br>• Source of vapors identified.<br>• Corrective actions taken to abate emissions.<br>• Continued monitoring.<br>• Workers will don appropriate respirators and work can resume if vapor levels 200 feet downwind or the hot zone or half the distance to the nearest potential receptor or residential or commercial structure, whichever is less – but in no case less than 20 feet – is below 5 ppm above background for the 15-minute average |
| >25ppm at the parameter of the hot zone | Activities will shut down |

| **Particulate Monitoring Action Levels** | **Action Required** |
|---|---|
| Background to 100 micrograms per cubic meter (µg/m³)[2], no dust observed | No further action |
| Background to 100 µg/m³, dust observed leaving the work area | Dust suppression must be employed. |
| 100 to 150 µg/m³ at the downwind parameter of the hot zone | • Work activities will be halted.<br>• Source of dust identified.<br>• Dust suppression activities initiated.<br>• Corrective actions taken to abate emissions.<br>• Continued monitoring.<br>• Workers will don appropriate respirators.<br>• Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM10 concentration to within 150 µg/m³ of the upwind level and in preventing visible dust migration. |
| >150 µg/m³ at the parameter of the hot zone | Activities will shut down |

[1] VOC concentrations are 15-minute averages above site background (upwind parameter)
[2] Particulate concentrations are 15-minute averages above site background (upwind parameter)

# TABLE 5
# EMERGENCY NOTIFICATION LIST

| ORGANIZATION | CONTACT | TELEPHONE |
|---|---|---|
| Local Police Department | | 911 |
| Local Fire Department | | 911 |
| Ambulance/Rescue Squad | | 911 |
| Hospital | Saint Joseph's Medical Center | 911 or 914-378-7000 |
| Langan Incident Hotline | | 973-560-4699 |
| Medical Treatment Hotline | WorkCare™ | 911 or 888-449-7757 |
| Langan Environmental Project Manager | Emily Butler | 719-434-6722 (cell) |
| Langan Construction Health and Safety Manager (HSM) | Tony Moffa | 215-756-2523 (cell) |
| Langan Health & Safety Officer (HSO) | William Bohrer | 410-984-3068 (cell) |
| Langan Field Team Leader (FTL) | To Be Determined | |
| Client's Representative | John B. Saraceno | 914-789-5000 |
| National Response Center (NRC) | | 800-424-8802 |
| Chemical Transportation Emergency Center (Chemtrec) | | 800-424-9300 |
| Center for Disease Control (CDC) | | 404-639-3534 |
| EPA (RCRA Superfund Hotline) | | 800-424-9346 |
| TSCA Hotline | | 202-554-1404 |
| Poison Control Center | | 800-222-1222 |

***Immediately following an injury, unless immediate emergency medical treatment is required, the injured employee must contact WorkCare - Incident Intervention® at 888-449-7787.***

***For all other incidents or near misses, unless emergency response is required, either the employee or a coworker must contact the Langan Incident Hotline at 973-560-4699.***

# TABLE 6
# SUGGESTED FREQUENCY OF PHYSIOLOGICAL MONITORINGFOR FIT AND ACCLIMATED WORKERS[A]

| Adjusted Temperature[b] | Normal Work Ensemble[c] | Impermeable Ensemble |
|---|---|---|
| 90°F or above (32.2°C) or above | After each 45 min. of work | After each 15 min. of work |
| 87.5°F (30.8°-32.2°C) | After each 60 min. of work | After each 30 min. of work |
| 82.5°-87.5°F (28.1°-30.8°C) | After each 90 min. of work | After each 60 min. of work |
| 77.5°-82.5°F (25.3°-28.1°C) | After each 120 min. of work | After each 90 min. of work |
| 72.5°-77.5°F (22.5°-25.3°C) | After each 150 min. of work | After each 120 min. of work |

a For work levels of 250 kilocalories/hour.

b Calculate the adjusted air temperature (ta adj) by using this equation: ta adj $^{o}$F = ta $^{o}$F + (13 x % sunshine). Measure air temperature (ta) with a standard mercury-in-glass thermometer, with the bulb shielded from radiant heat. Estimate percent sunshine by judging what percent time the sun is not covered by clouds that are thick enough to produce a shadow. (100 percent sunshine = no cloud cover and a sharp, distinct shadow; 0 percent sunshine = no shadows.)

c A normal work ensemble consists of cotton coveralls or other cotton clothing with long sleeves and pants.

# TABLE 7
# HEAT INDEX

| | ENVIRONMENTAL TEMPERATURE (Fahrenheit) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **70** | **75** | **80** | **85** | **90** | **95** | **100** | **105** | **110** | **115** | **120** |
| **RELATIVE HUMIDITY** | **APPARENT TEMPERATURE*** | | | | | | | | | | |
| **0%** | 64 | 69 | 73 | 78 | 83 | 87 | 91 | 95 | 99 | 103 | 107 |
| **10%** | 65 | 70 | 75 | 80 | 85 | 90 | 95 | 100 | 105 | 111 | 116 |
| **20%** | 66 | 72 | 77 | 82 | 87 | 93 | 99 | 105 | 112 | 120 | **130** |
| **30%** | 67 | 73 | 78 | 84 | 90 | 96 | 104 | 113 | 123 | **135** | **148** |
| **40%** | 68 | 74 | 79 | 86 | 93 | 101 | 110 | 123 | **137** | **151** | |
| **50%** | 69 | 75 | 81 | 88 | 96 | 107 | 120 | **135** | **150** | | |
| **60%** | 70 | 76 | 82 | 90 | 100 | 114 | **132** | **149** | | | |
| **70%** | 70 | 77 | 85 | 93 | 106 | 124 | **144** | | | | |
| **80%** | 71 | 78 | 86 | 97 | 113 | **136** | | | | | |
| **90%** | 71 | 79 | 88 | 102 | 122 | | | | | | |
| **100%** | 72 | 80 | 91 | 108 | | | | | | | |

*Combined Index of Heat and Humidity...what it "feels like" to the body

Source: National Oceanic and Atmospheric Administration

How to use Heat Index:

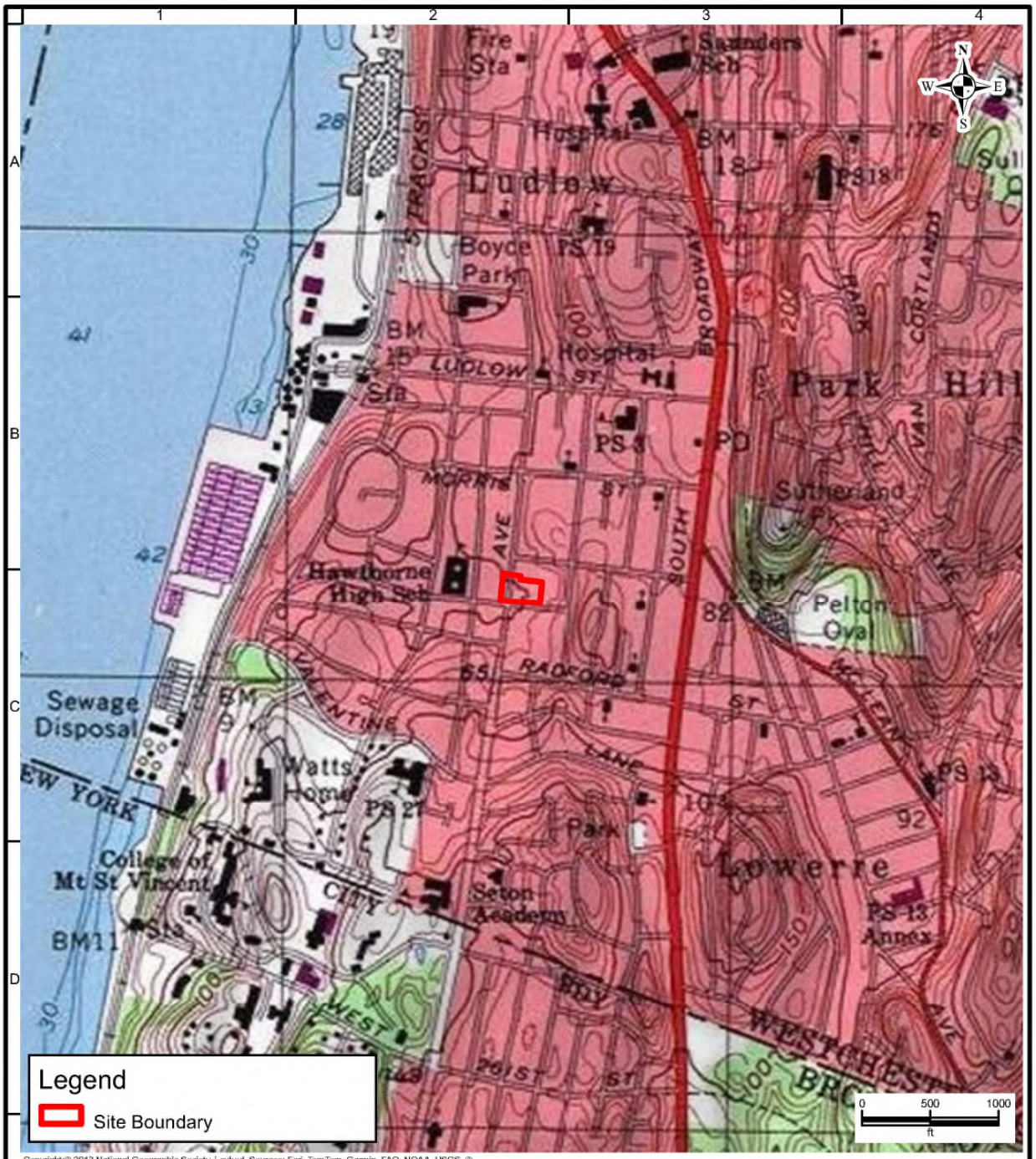
1. Across top locate Environmental Temperature
2. Down left side locate Relative Humidity
3. Follow across and down to find Apparent Temperature
4. Determine Heat Stress Risk on chart at right

Note: Exposure to full sunshine can increase Heat Index values by up to 15 degrees F.

| **Apparent Temperature** | **Heat Stress Risk with Physical Activity and/or Prolonged Exposure** |
|---|---|
| 90-105 | Heat Cramps or Heat Exhaustion Possible |
| 105-130 | Heat Cramps or Heat Exhaustion Likely, Heat Stroke Possible |
| **>130** | Heatstroke Highly Likely |

# FIGURES

# FIGURE 1
# SITE LOCATION MAP

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Langan International
Collectively known as Langan

| | |
|---|---|
| Project | 372 Riversdale Ave & 13 Culver Street, Yonkers<br>YONKERS<br>WESTCHESTER COUNTY NY |
| Figure Title | SITE LOCATION |
| Project No. | 190141301 |
| Date | 5/26/2026 |
| Scale | 1 inch = 1,000 feet |
| Drawn By | Site Analyzer |
| Submission Date | 5/26/2026 |
| Figure | 1 |
| | Sheet 1 of 1 |

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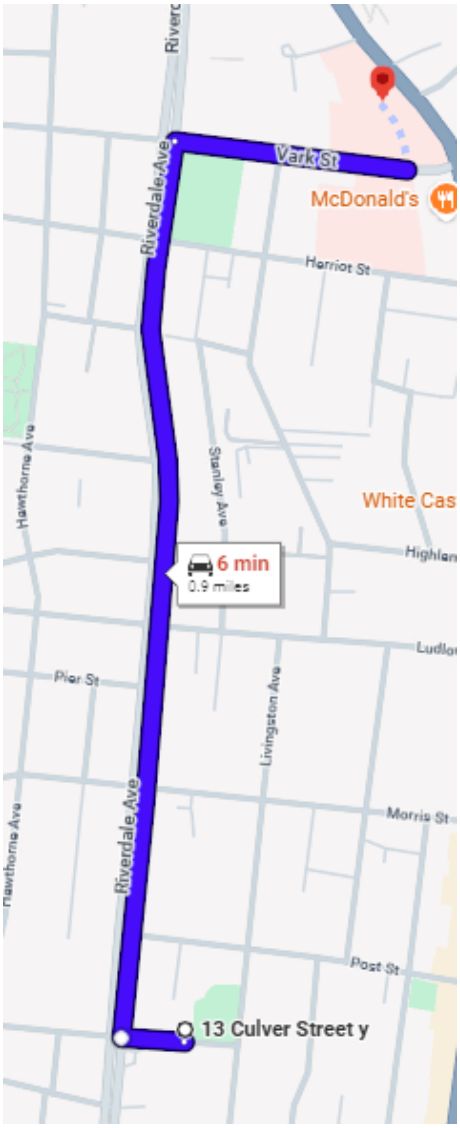
# FIGURE 2
# HOSPITAL ROUTE PLAN

**Hospital Location:** **Saint Joseph's Medical Center**
**127 S Broadway**
**Yonkers, New York**
**914-378-7000**

***START: 13 Culver Street, Yonkers, New York***

1. Head toward Riverdale Ave
2. Turn right onto Riverdale Ave
3. Tur right onto Vark St, destination is on the left.

***END: Saint Joseph's Medical Center, 127 S Broadway, Yonkers, New York***



# ATTACHMENTS

# ATTACHMENT A

# STANDING ORDERS

# STANDING ORDERS

## GENERAL

- No smoking, eating, or drinking in this work zone.
- Upon leaving the work zone, personnel will thoroughly wash their hands and face.
- Minimize contact with contaminated materials through proper planning of work areas and decontamination areas, and by following proper procedures. Do not place equipment on the ground. Do not sit on contaminated materials.
- No open flames in the work zone.
- Only properly trained and equipped personnel are permitted to work in potentially contaminated areas.
- Always use the appropriate level of personal protective equipment (PPE).
- Maintain close contact with your buddy in the work zone.
- Contaminated material will be contained in the Exclusion Zone (EZ).
- Report any unusual conditions.
- Work areas will be kept clear and uncluttered. Debris and other slip, trip, and fall hazards will be removed as frequently as possible.
- The number of personnel and equipment in the work zone will be kept to an essential minimum.
- Be alert to the symptoms of fatigue and heat/cold stress, and their effects on the normal caution and judgment of personnel.
- Conflicting situations which may arise concerning safety requirements and working conditions must be addressed and resolved quickly by the site HSO.

## TOOLS AND HEAVY EQUIPMENT

- Do not, under any circumstances, enter or ride in or on any backhoe bucket, materials hoist, or any other device not specifically designed to carry passengers.
- Loose-fitting clothing or loose long hair is prohibited around moving machinery.
- Ensure that heavy equipment operators and all other personnel in the work zone are using the same hand signals to communicate.
- Drilling/excavating within 10 feet in any direction of overhead power lines is prohibited.
- The locations of all underground utilities must be identified and marked out prior to initiating any subsurface activities.
- Check to ensure that the equipment operator has lowered all blades and buckets to the ground before shutting off the vehicle.
- If the equipment has an emergency stop device, have the operator show all personnel its location and how to activate it.
- Help the operator ensure adequate clearances when the equipment must negotiate in tight quarters; serve as a signal operator to direct backing, as necessary.
- Ensure that all heavy equipment that is used in the Exclusion Zone is kept in that zone until the job is done and that such equipment is completely decontaminated before moving it into the clean area of the work zone.
- Samplers must not reach into or get near rotating equipment such as the drill rig. If personnel must work near any tools that could rotate, the equipment operator must completely shut down the rig prior to initiating such work. It may be necessary to use a remote sampling device.

# ATTACHMENT B

# DECONTAMINATION PROCEDURES

# PERSONNEL DECONTAMINATION

## LEVEL C DECONTAMINATION

| | | |
|---|---|---|
| Station 1: | Equipment Drop | 1. Deposit equipment used on-site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths. Segregation at the drop reduces the probability of cross-contamination. During hot weather operations, cool down stations may be set up within this area. |
| Station 2: | Outer Garment, Boots, and Gloves Wash and Rinse | 2. Scrub outer boots, outer gloves, and chemical-resistant splash suit with decon solution or detergent and water. Rinse off using copious amounts of water. |
| Station 3: | Outer Boot and Glove Removal | 3. Remove outer boots and gloves. Deposit in container with plastic liner. |
| Station 4: | Canister or Mask Change | 4. If worker leaves Exclusion Zone to change canister (or mask), this is the last step in the decontamination procedure. Worker's canister is exchanged, new outer gloves and boot covers donned, joints taped, and worker returns to duty. |
| Station 5: | Boot, Gloves and Outer Garment Removal | 5. Boots, chemical-resistant splash suit, inner gloves removed and deposited in separate containers lined with plastic. |
| Station 6: | Face piece Removal | 6. Face piece is removed (avoid touching face with fingers). Face piece deposited on plastic sheets. |
| Station 7: | Field Wash | 7. Hands and face are thoroughly washed. Shower as soon as possible. |

## LEVEL D DECONTAMINATION

| | | |
|---|---|---|
| Station 1: | Equipment Drop | 1. Deposit equipment used on-site (tools, sampling devices and containers, monitoring instruments, radios, clipboards, etc.) on plastic drop cloths. Segregation at the drop reduces the probability of cross contamination. During hot weather operations, cool down stations may be set up within this area. |
| Station 2: | Outer Garment, Boots, and Gloves Wash and Rinse | 2. Scrub outer boots, outer gloves and chemical-resistant splash suit with decon solution or detergent and water. Rinse off using copious amounts of water. |
| Station 3: | Outer Boot and Glove Removal | 3. Remove outer boots and gloves. Deposit in container with plastic liner. |
| Station 4: | Boot, Gloves and Outer Garment Removal | 4. Boots, chemical-resistant splash suit, inner gloves removed and deposited in separate containers lined with plastic. |
| Station 5: | Field Wash | 5. Hands and face are thoroughly washed. Shower as soon as possible. |

# EQUIPMENT DECONTAMINATION

## GENERAL:

Equipment to be decontaminated during the project may include tools, monitoring equipment, respirators, sampling containers, laboratory equipment, and drilling equipment.

All decontamination will be done by personnel in protective gear, appropriate for the level of decontamination, as determined by the site HSO. The decontamination work tasks will be split or rotated among support and work crews.

Depending on site conditions, backhoes and pumps may be decontaminated over a portable decontamination pad to contain wash water; or wash water may be allowed to run off into a storm sewer system. Equipment needed may include a steam generator with high-pressure water, empty drums, screens, screen support structures, and shovels. Drums will be used to hold contaminated wash water pumped from the lined pit. These drums will be labeled as such.

Miscellaneous tools and equipment will be dropped into a plastic bucket, tub, or other containers. They will be brushed off and rinsed with a detergent solution, and finally rinsed with clean water.

## MONITORING EQUIPMENT:

Monitoring equipment will be protected as much as possible from contamination by draping, masking, or otherwise covering as many of the instruments as possible with plastic without hindering the operation of the unit. The PID, HNu, or OVA meter, for example, can be placed in a clear plastic bag, which allows reading of the scale and operation of knobs. The probes can be partially wrapped keeping the sensor tip and discharge port clear.

The contaminated equipment will be taken from the drop area and the protective coverings removed and disposed of in the appropriate containers. Any dirt or obvious contamination will be brushed or wiped with a disposable paper wipe.

## RESPIRATORS:

Respirators will be cleaned and disinfected after every use. Taken from the drop area, the masks (with the cartridges removed and disposed of with other used disposable gear) will be immersed in a cleaning solution and scrubbed gently with a soft brush, followed by a rinse in plain warm water, and then allowed to air dry. In the morning, new cartridges will be installed. Personnel will inspect their own masks for serviceability prior to donning them. And, once the mask is on, the wearer will check the respirator for leakage using the negative and positive pressure fit check techniques.

# ATTACHMENT C

# EMPLOYEE EXPOSURE/INJURY INCIDENT REPORT

# EMPLOYEE INCIDENT/INJURY REPORT
# LANGAN ENGINEERING & ENVIRONMENTAL SERVICES

***(Complete and return to Tony Moffa in the Doylestown Office)***

Affected Employee Name: _____ Date: _____

Incident type: ☐ Injury ☐ Report Only/No Injury
☐ Near Miss ☐ Other: _____

---

**EMPLOYEE INFORMATION** (Person completing Form)

Employee Name: _____ Employee No: _____

Title: _____ Office Location: _____

Length of time employed or date of hire: _____

Mailing address: _____

_____

Sex: M ☐ F ☐ Birth date: _____

Business phone & extension: _____ Residence/cell phone: _____

---

**ACCIDENT INFORMATION**

Project: _____ Project #: _____

Date & time of incident: _____ Time work started & ended: _____

Site location: _____

Incident Type: Possible Exposure ☐ Exposure ☐ Physical Injury ☐

Names of person(s) who witnessed the incident:_____

_____

_____

Exact location incident occurred:

_____

_____

Describe work being done:_____

_____

_____

_____

Describe what affected employee was doing prior to the incident occurring:

_____

_____

_____

Describe in detail how the incident occurred:

_____

_____

_____

_____

Nature of the incident (List the parts of the body affected):

_____

_____

_____

_____

Person(s) to whom the incident was reported (Time and Date):

_____

_____

List the names of other persons affected during this incident:

_____

_____

Possible causes of the incident (equipment, unsafe work practices, lack of PPE, etc.):

Weather conditions during incident:

**MEDICAL CARE INFORMATION**

Did affected employee receive medical care? Yes ☐ No ☐

If Yes, when, and where was medical care received:

Provide name of facility (hospital, clinic, etc.):

Length of stay at the facility.

Did the employee miss any work time? Yes ☐ No ☐ Undetermined ☐

Date employee last worked: _____ Date employee returned to work:

Has the employee returned to work? Yes ☐ No ☐

Does the employee have any work limitations or restrictions from the injury? : Yes ☐ No ☐

If Yes, please describe:

Did the exposure/injury result in permanent disability? Yes ☐ No ☐ Unknown ☐

If Yes, please describe:

**HEALTH & SAFETY INFORMATION**

Was the operation being conducted under an established site-specific Construction Health and Safety Plan?
Yes ☐ No ☐ Not Applicable: ☐

Describe protective equipment and clothing used by the employee:

_____

_____

_____

Did any limitations in safety equipment or protective clothing contribute to or affect exposure/injury? If so, explain:

_____

_____

_____

_____

Employee Signature Date

_____

Langan Representative Date

# ATTACHMENT D

# CALIBRATION LOG

**DATE:**_____ **PROJECT:**_____

## CALIBRATION LOG

| Date & Time | Inst Type | Inst # | Media | Initial Reading | Span # | Calibrate Reading | Performed By: |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

# ATTACHMENT E

# SAFETY DATA SHEETS

# SAFETY DATA SHEET

Version 5.3
Revision Date 12/29/2015
Print Date 04/11/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : 1,1-Dichloroethane

Product Number : 48512
Brand : Supelco
Index-No. : 602-011-00-1

CAS-No. : 75-34-3

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 2), H225
Acute toxicity, Oral (Category 4), H302
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Acute aquatic toxicity (Category 3), H402
Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

| | |
|---|---|
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P301 + P312 + P330 | IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Synonyms | : | Ethylidene chloride |
| Formula | : | $C_2H_4Cl_2$ |
| Molecular weight | : | 98.96 g/mol |
| CAS-No. | : | 75-34-3 |
| EC-No. | : | 200-863-5 |
| Index-No. | : | 602-011-00-1 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **1,1-Dichloroethane** | | |
| | Flam. Liq. 2; Acute Tox. 4; Eye Irrit. 2A; STOT SE 3; Aquatic Acute 3; Aquatic Chronic 3; H225, H302, H319, H335, H412 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Use explosion-proof equipment.Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Flammable liquids

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| 1,1-Dichloroethane | 75-34-3 | TWA | 100.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Upper Respiratory Tract irritation<br>Eye irritation<br>Liver damage<br>Kidney damage<br>Not classifiable as a human carcinogen | | |
| | | TWA | 100.000000 ppm<br>400.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | See Appendix C | | |
| | | TWA | 100.000000 ppm<br>400.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | The value in mg/m3 is approximate. | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: butyl-rubber
Minimum layer thickness: 0.3 mm
Break through time: 60 min
Material tested:Butoject® (KCL 897 / Aldrich Z677647, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering

controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | -97.99 °C (-144.38 °F) |
| f) | Initial boiling point and boiling range | 55.0 - 58.0 °C (131.0 - 136.4 °F) |
| g) | Flash point | -9.99 °C (14.02 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 1.17 g/cm3 |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information
No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity
No data available

### 10.2 Chemical stability
Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions
Vapours may form explosive mixture with air.

### 10.4 Conditions to avoid
Heat, flames and sparks.

**10.5 Incompatible materials**
Oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 725.0 mg/kg

LC50 Inhalation - Rat - 4 h - 13000 ppm

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
Chronic exposure may cause dermatitis.

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

| | |
|---|---|
| IARC: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: KI0175000

Liver injury may occur., Kidney injury may occur., narcosis, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Central nervous system -

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**
No data available

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2362 Class: 3 Packing group: II
Proper shipping name: 1,1-Dichloroethane
Reportable Quantity (RQ): 1000 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 2362 Class: 3 Packing group: II EMS-No: F-E, S-D
Proper shipping name: 1,1-DICHLOROETHANE

**IATA**
UN number: 2362 Class: 3 Packing group: II
Proper shipping name: 1,1-Dichloroethane

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| 1,1-Dichloroethane | 75-34-3 | 2007-07-01 |

**SARA 311/312 Hazards**
Fire Hazard, Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,1-Dichloroethane | 75-34-3 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,1-Dichloroethane | 75-34-3 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,1-Dichloroethane | 75-34-3 | 2007-07-01 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| 1,1-Dichloroethane | 75-34-3 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Eye Irrit. | Eye irritation |
| Flam. Liq. | Flammable liquids |
| H225 | Highly flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 3 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.3 Revision Date: 12/29/2015 Print Date: 04/11/2016

# *M A T E R I A L  S A F E T Y  D A T A  S H E E T*

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Company: AccuStandard, Inc.
125 Market Street
New Haven, CT 06513

Date MSDS Printed: 4/21/2006
Preparation Date: 4/21/2006
Information Phone Number: 203-786-5290
Emergency Phone Number: 203-786-5290
Hours: Mon. to Fri. 8am-5pm EDT

MSDS Number: V-029
Product Name: 1,2,4-Trimethylbenzene
Synonyms: 1,2,4-Trimethylbenzene; Pseudocumene; psi-Cumene; Assymetrical trimethylbenzene
Formula: $C_9H_{12}$ Molecular Weight: 120.19

## SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

| Component(s) ( 1 ) | CAS # | Appr. % | ACGIH-TLV (mg/m3) TWA | ACGIH-TLV (mg/m3) STEL skin | OSHA-PEL (mg/m3) TWA | OSHA-PEL (mg/m3) STEL skin |
|---|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | 95-63-6 | 100 | 123 | | | |

## SECTION 3 - HAZARDS IDENTIFICATION

**Symptoms of Exposure:**

Irritating to eyes, skin, mucous membranes and upper respiratory system.

Narcotic in high concentrations.

May cause headache, dizziness, nausea, and narcosis.

May cause stomach cramps and gastro-intestinal disturbances.

To the best of our knowledge the chemical, physical and toxicological properties of the component ingredients have not been thoroughly investigated.

**Potential Health Effects:**

Harmful if inhaled.

May be harmful if absorbed through skin or swallowed

May cause central nervous system damage.

**Routes of Entry:**

Inhalation, ingestion or skin contact.

**Carcinogenicity:**

This product is or contains a component that is not listed (ACGIH, IARC, NTP, OSHA) as a cancer causing agent.


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## SECTION 4 - FIRST AID MEASURES

**Emergency First Aid:**

Get medical assistance for all cases of overexposure.

Skin contact: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

Eye contact: Immediately flush with plenty of water. After initial flushing, remove and contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

Ingestion: Call a physician or poison control center immediately. ONLY induce vomiting at the instructions of a physician. Never give anything by mouth to an unconscious person.

## SECTION 5 - FIRE FIGHTING MEASURES

**Flammable Properties:**

Flash Point: 118.4 °F (48 °C) (cc)

Flammable Limits LEL (%): 0.9

Flammable Limits UEL (%): 6.4

Autoignition Temperature: 515 °C

Flammable liquid and vapor.

Vapors can travel to a source of ignition and flash back.

Containers can build up pressure if exposed to heat.

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:**

Use alcohol foam, carbon dioxide, dry chemical, or water spray when fighting fires involving this material.

**Fire Fighting Procedures:**

As in any fire, wear self-contained breathing apparatus pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Spill Response:**

Wear a self-contained breathing apparatus and appropriate Personal protection. Stop leak if you can do so without risk. Ventilate area. Neutralize spill with soda ash or lime. Take up and containerize for proper disposal. Flush spill area with water. Keep combustibles away from spilled material. Comply with Federal, State, and local regulations.

## SECTION 7 - HANDLING AND STORAGE

Store in a tighly closed container.

Store in a cool area away from ignition sources and oxidizers.

Do not breathe vapor.

Do not get in eyes, on skin or clothing.

Avoid prolonged or repeated exposure.

This product should only by used by persons trained in the safe handling of hazardous chemicals.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls and Personal Protection Equipment (PPE):**

Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other


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NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier). Engineering and/or administrative controls should be implemented to reduce exposure.

Material should be handled or transferred in an approved fume hood or with adequate ventilation.

Compatible chemical-resistant protective gloves must be worn to prevent skin contact.

Safety glasses with side shields must be worn at all times.

**General Hygiene Considerations:**

Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid
Odor: Aromatic
pH: N/A
Vapor Pressure: 7 mmHg (44.4 °C)
Vapor Density (Air = 1): 4.2 g/l
Boiling Point: 168 - 169 °C
Melting Point: -43.7 °C
Solubility in Water (%): Insoluble
Specific Gravity ($H_2O$ = 1): 0.876 g/cm3
Flash Point: 118.4 °F (48 °C) (cc)
Explosion Limits (%): 0.9 to 6.4
Autoignition Temperature: 515 °C
Percent Volatile: N/A
Evaporation Rate (BuAc = 1): N/A
Molecular Weight: 120.19
Molecular Formula: $C_9H_{12}$

## SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable
Conditions To Avoid: Heat; Contact with ignition sources
Materials To Avoid: Oxidizers

Hazardous Decomposition: Carbon oxides
Hazardous Polymerization: Will not occur

## SECTION 11 - TOXICOLOGICAL INFORMATION

See section 3 for specific toxicological information for the ingredients of this product.

## SECTION 12 - ECOLOGICAL INFORMATION

By complying with sections 6 and 7 there will be no release to the environment.


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## SECTION 13 - DISPOSAL CONSIDERATIONS

Recycle or incinerate at any EPA approved facility or dispose in compliance with Federal, State and local regulations. Empty containers must be triple-rinsed prior to disposal.

## SECTION 14 - TRANSPORT INFORMATION

**DOT** UN Number: UN3295 Shipping Class: 3 Packing Group: III FLAMMABLE

## SECTION 15 - REGULATORY INFORMATION

In addition to Federal and state regulations, local regulations may apply. Check with your local regulatory authorities.

## SECTION 16 - OTHER INFORMATION

This document has been designed to meet the requirements of OSHA, ANSI and CHIPs regulations.

The statements contained herein are offered for informational purposes only and are based on technical data that we believe to be accurate. It is intended for use only by persons having the necessary technical skill and at their own discretion and risk. Since conditions and manner of use are outside our control, we make
NO WARRANTY, EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE.

Legend : N/A = Not Available ND = Not Determined NR = Not Regulated

* * * End of Document * * *


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# SAFETY DATA SHEET

Version 4.7
Revision Date 11/26/2015
Print Date 02/11/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : 1,2-Dichlorobenzene

Product Number : 240664
Brand : Sigma-Aldrich
Index-No. : 602-034-00-7

CAS-No. : 95-50-1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 4), H227
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Skin sensitisation (Category 1), H317
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)
H227 Combustible liquid.
H302 + H332 Harmful if swallowed or if inhaled
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

| | |
|---|---|
| H335 | May cause respiratory irritation. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P301 + P312 + P330 | IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $C_6H_4Cl_2$ |
| Molecular weight | : | 147.00 g/mol |
| CAS-No. | : | 95-50-1 |
| EC-No. | : | 202-425-9 |
| Index-No. | : | 602-034-00-7 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **1,2-Dichlorobenzene** | | |
| | Flam. Liq. 4; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; Skin Sens. 1; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H227, H302 + H332, H315, H317, H319, H335, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Light sensitive.
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| 1,2-Dichlorobenzene | 95-50-1 | TWA | 25.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Upper Respiratory Tract irritation<br>Eye irritation<br>Liver damage<br>Not classifiable as a human carcinogen | | |
| | | TWA | 25 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Eye irritation<br>Liver damage<br>Not classifiable as a human carcinogen | | |
| | | STEL | 50.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Eye irritation<br>Liver damage<br>Not classifiable as a human carcinogen | | |
| | | STEL | 50 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Eye irritation<br>Liver damage<br>Not classifiable as a human carcinogen | | |
| | | C | 50.000000 ppm<br>300.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | The value in mg/m3 is approximate.<br>Ceiling limit is to be determined from breathing-zone air samples. | | |
| | | C | 50.000000 ppm<br>300.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 38 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid, clear<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -18 - -17 °C (0 - 1 °F) - lit. |
| f) | Initial boiling point and boiling range | 178 - 180 °C (352 - 356 °F) - lit. |
| g) | Flash point | 66.0 °C (150.8 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 9.2 %(V)<br>Lower explosion limit: 2.2 %(V) |
| k) | Vapour pressure | 2.1 hPa (1.6 mmHg) at 35.0 °C (95.0 °F)<br>1.6 hPa (1.2 mmHg) at 20.0 °C (68.0 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 1.306 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | ca.0.1558 g/l at 25 °C (77 °F) - partly soluble |
| o) | Partition coefficient: n-octanol/water | log Pow: ca.3.433 at 25 °C (77 °F) |
| p) | Auto-ignition temperature | 648.0 °C (1,198.4 °F) |
| q) | Decomposition | No data available |

temperature

| | | |
|---|---|---|
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**

| | |
|---|---|
| Surface tension | ca.36.61 mN/m |

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
Heat, flames and sparks.

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 500.0 mg/kg

Inhalation: No data available

LD50 Dermal - Rabbit - > 10,000 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Rabbit
(OECD Test Guideline 404)

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
in vivo assay - Mouse
May cause sensitisation by skin contact.
(OECD Test Guideline 429)

**Germ cell mutagenicity**
No data available

Ames test
Salmonella typhimurium
Result: negative

OECD Test Guideline 474
Mouse - male - Bone marrow
Result: negative

**Carcinogenicity**

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (1,2-Dichlorobenzene)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**

**Aspiration hazard**
No data available

**Additional Information**

| | |
|---|---|
| Repeated dose toxicity | Rat - male and female - Oral - 24 h - NOAEL : 60 mg/kg - LOAEL : 125 mg/kg - OECD Test Guideline 408 |

RTECS: CZ4500000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence
Stomach - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 1.58 mg/l - 96 h |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Ceriodaphnia dubia (water flea) - 0.66 mg/l - 48 h |
| Toxicity to algae | Growth inhibition EC50 - Pseudokirchneriella subcapitata - 2.2 mg/l - 96 h |

### 12.2 Persistence and degradability

| | |
|---|---|
| Biodegradability | aerobic - Exposure time 28 d<br>Result: 0 % - Not readily biodegradable.<br>(OECD Test Guideline 301C) |

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Cyprinus carpio (Carp) - 56 d<br>- 0.01 mg/l<br><br>Bioconcentration factor (BCF): 90 - 260<br>(OECD Test Guideline 305C) |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1591 Class: 6.1 Packing group: III
Proper shipping name: o-Dichlorobenzene
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 1591 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: ortho-DICHLOROBENZENE
Marine pollutant:yes

**IATA**
UN number: 1591 Class: 6.1 Packing group: III
Proper shipping name: o-Dichlorobenzene

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| 1,2-Dichlorobenzene | 95-50-1 | 2007-07-01 |

**SARA 311/312 Hazards**
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,2-Dichlorobenzene | 95-50-1 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,2-Dichlorobenzene | 95-50-1 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,2-Dichlorobenzene | 95-50-1 | 2007-07-01 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

Acute Tox. Acute toxicity

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Eye Irrit. | Eye irritation |
| Flam. Liq. | Flammable liquids |
| H227 | Combustible liquid. |
| H302 | Harmful if swallowed. |
| H302 + H332 | Harmful if swallowed or if inhaled |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 2 |
| Physical Hazard | 1 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 2 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.7 Revision Date: 11/26/2015 Print Date: 02/11/2016

# SAFETY DATA SHEET

**Creation Date** 04-Feb-2010 **Revision Date** 18-Jan-2018 **Revision Number** 6

## 1. Identification

**Product Name** **1,2-Dichloroethane**

**Cat No. :** **E175-4; E175-20; E175-500; E175RS-19; E175RS-50; E190-4**

**CAS-No** 107-06-2
**Synonyms** Ethylene dichloride; Ethylene chloride (Certified ACS/Spectranalyzed)

**Recommended Use** Laboratory chemicals.
**Uses advised against** Not for food, drug, pesticide or biocidal product use

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Emergency Telephone Number**
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

## 2. Hazard(s) identification

**Classification**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Flammable liquids | Category 2 |
| Acute oral toxicity | Category 4 |
| Acute Inhalation Toxicity - Vapors | Category 3 |
| Skin Corrosion/irritation | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Carcinogenicity | Category 1B |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Respiratory system, Central nervous system (CNS). | |
| Specific target organ toxicity - (repeated exposure) | Category 2 |
| Target Organs - Kidney, Liver, Heart, Blood. | |

**Label Elements**

**Signal Word**
Danger

**Hazard Statements**
Highly flammable liquid and vapor
Harmful if swallowed
Causes skin irritation
Causes serious eye irritation

Toxic if inhaled
May cause respiratory irritation
May cause drowsiness or dizziness
May cause cancer
May cause damage to organs through prolonged or repeated exposure



**Precautionary Statements**
**Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool
**Response**
IF exposed or concerned: Get medical attention/advice
**Inhalation**
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician
**Skin**
If skin irritation occurs: Get medical advice/attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
**Eyes**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
**Ingestion**
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
**Fire**
In case of fire: Use CO2, dry chemical, or foam for extinction
**Storage**
Store locked up
Store in a well-ventilated place. Keep container tightly closed
**Disposal**
Dispose of contents/container to an approved waste disposal plant
**Hazards not otherwise classified (HNOC)**

**WARNING.** Cancer - https://www.p65warnings.ca.gov/.

## 3. Composition/Information on Ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Ethylene dichloride | 107-06-2 | >95 |

## 4. First-aid measures

**General Advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

**Ingestion** Do not induce vomiting. Call a physician or Poison Control Center immediately.

**Most important symptoms and effects** Breathing difficulties. May cause cardiac arrhythmia. May cause central nervous system depression: Symptoms may include tightness in the chest, flushing, headache, nausea, vomiting, respiratory depression, weakness, irregular heartbeat, abdominal pain, convulsions, and shock

**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray.

**Unsuitable Extinguishing Media** Water may be ineffective

**Flash Point** 13 °C / 55.4 °F

**Method -** No information available

**Autoignition Temperature** 440 °C / 824 °F

**Explosion Limits**

**Upper** 15.9 vol %
**Lower** 6.2 vol %
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors.

**Hazardous Combustion Products**
Carbon monoxide (CO) Carbon dioxide ($CO_2$) Hydrogen chloride gas Phosgene
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 3 | 3 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

**Environmental Precautions** Should not be released into the environment. See Section 12 for additional ecological information.

**Methods for Containment and Clean Up** Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## 7. Handling and storage

**Handling** Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not ingest. Use only under a chemical fume hood. Do not breathe vapors or spray mist. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH | Mexico OEL (TWA) |
|---|---|---|---|---|
| Ethylene dichloride | TWA: 10 ppm | (Vacated) TWA: 1 ppm<br>(Vacated) TWA: 4 mg/m³<br>Ceiling: 100 ppm<br>(Vacated) STEL: 2 ppm<br>(Vacated) STEL: 8 mg/m³<br>TWA: 50 ppm | IDLH: 50 ppm<br>TWA: 1 ppm<br>TWA: 4 mg/m³<br>STEL: 2 ppm<br>STEL: 8 mg/m³ | TWA: 10 ppm<br>TWA: 40 mg/m³ |

*Legend*

*ACGIH - American Conference of Governmental Industrial Hygienists*
*OSHA - Occupational Safety and Health Administration*
*NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health*

**Engineering Measures** Use only under a chemical fume hood. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Tightly fitting safety goggles. Face-shield.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Liquid |
| **Appearance** | Colorless |
| **Odor** | sweet |
| **Odor Threshold** | 400 ppm |
| **pH** | No information available |
| **Melting Point/Range** | -35 °C / -31 °F |
| **Boiling Point/Range** | 81 - 85 °C / 177.8 - 185 °F |
| **Flash Point** | 13 °C / 55.4 °F |
| **Evaporation Rate** | 6.5 (Butyl Acetate = 1.0) |
| **Flammability (solid,gas)** | Not applicable |
| **Flammability or explosive limits** | |
| **Upper** | 15.9 vol % |
| **Lower** | 6.2 vol % |
| **Vapor Pressure** | 65 mmHg @ 29 °C |
| **Vapor Density** | 3.4 |
| **Specific Gravity** | 1.250 |
| **Solubility** | Insoluble in water |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | 440 °C / 824 °F |
| **Decomposition Temperature** | No information available |
| **Viscosity** | 0.8 mPa s at 20 °C |
| **Molecular Formula** | C2 H4 Cl2 |
| **Molecular Weight** | 98.96 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.

**Incompatible Materials** Strong oxidizing agents, Bases, Alkali metals

**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide ($CO_2$), Hydrogen chloride gas, Phosgene

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information**

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Ethylene dichloride | 625 mg/kg ( Rat )<br>413 mg/kg ( Mouse ) | 2800 mg/kg ( Rabbit ) | 28.79 mg/L ( Rat ) 1h<br>7.8 mg/l ( Rat ) 4h |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** Irritating to eyes, respiratory system and skin

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Ethylene dichloride | 107-06-2 | Group 2B | Reasonably Anticipated | Not listed | X | Not listed |

*IARC: (International Agency for Research on Cancer)*

*NTP: (National Toxicity Program)*

*IARC: (International Agency for Research on Cancer)*
*Group 1 - Carcinogenic to Humans*
*Group 2A - Probably Carcinogenic to Humans*
*Group 2B - Possibly Carcinogenic to Humans*
*NTP: (National Toxicity Program)*
*Known - Known Carcinogen*
*Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen*

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Respiratory system Central nervous system (CNS)
**STOT - repeated exposure** Kidney Liver Heart Blood

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** May cause central nervous system depression: Symptoms may include tightness in the chest, flushing, headache, nausea, vomiting, respiratory depression, weakness, irregular heartbeat, abdominal pain, convulsions, and shock

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity**
Do not empty into drains.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|
| Ethylene dichloride | EC50: = 166 mg/L, 96h static (Desmodesmus subspicatus)<br>EC50: > 433 mg/L, 96h (Pseudokirchneriella subcapitata) | LC50: 110 - 123 mg/L, 96h flow-through (Pimephales promelas)<br>LC50: 230 - 710 mg/L, 96h flow-through (Lepomis macrochirus)<br>LC50: = 225 mg/L, 96h static (Oncorhynchus mykiss) | Not listed | EC50: 140 - 190 mg/L, 48h Static (Daphnia magna) |

**Persistence and Degradability** Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its volatility.

| Component | log Pow |
|---|---|
| Ethylene dichloride | 1.45 |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| Component | RCRA - U Series Wastes | RCRA - P Series Wastes |
|---|---|---|
| Ethylene dichloride - 107-06-2 | U077 | - |

## 14. Transport information

**DOT**

| | |
|---|---|
| **UN-No** | UN1184 |
| **Proper Shipping Name** | ETHYLENE DICHLORIDE |
| **Hazard Class** | 3 |
| **Subsidiary Hazard Class** | 6.1 |
| **Packing Group** | II |

**TDG**

| | |
|---|---|
| **UN-No** | UN1184 |
| **Proper Shipping Name** | ETHYLENE DICHLORIDE |
| **Hazard Class** | 3 |
| **Subsidiary Hazard Class** | 6.1 |
| **Packing Group** | II |

**IATA**

| | |
|---|---|
| **UN-No** | UN1184 |
| **Proper Shipping Name** | ETHYLENE DICHLORIDE |
| **Hazard Class** | 3 |
| **Subsidiary Hazard Class** | 6.1 |
| **Packing Group** | II |

**IMDG/IMO**

| | |
|---|---|
| **UN-No** | UN1184 |
| **Proper Shipping Name** | ETHYLENE DICHLORIDE |
| **Hazard Class** | 3 |
| **Subsidiary Hazard Class** | 6.1 |
| **Packing Group** | II |

## 15. Regulatory information

**All of the components in the product are on the following Inventory lists:** X = listed

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ethylene dichloride | X | X | - | 203-458-1 | - | | X | X | X | X | X |

**Legend:**
**X - Listed**
**E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.**
**F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.**
**N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.**
**P - Indicates a commenced PMN substance**
**R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.**
**S - Indicates a substance that is identified in a proposed or final Significant New Use Rule**
**T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.**
**XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).**
**Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.**
**Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.**

**U.S. Federal Regulations**

**TSCA 12(b)**

| Component | TSCA 12(b) |
|---|---|
| Ethylene dichloride | Section 4 |

**SARA 313**

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---|---|---|---|
| Ethylene dichloride | 107-06-2 | >95 | 0.1 |

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Ethylene dichloride | X | 100 lb | X | X |

**Clean Air Act**

| Component | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|---|---|---|---|
| Ethylene dichloride | X | | - |

**OSHA** Occupational Safety and Health Administration
Not applicable

**CERCLA** This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Ethylene dichloride | 100 lb 1 lb | - |

**California Proposition 65** This product contains the following proposition 65 chemicals

| Component | CAS-No | California Prop. 65 | Prop 65 NSRL | Category |
|---|---|---|---|---|
| Ethylene dichloride | 107-06-2 | Carcinogen | 10 µg/day | Carcinogen |

**U.S. State Right-to-Know Regulations**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Ethylene dichloride | X | X | X | X | - |

**U.S. Department of Transportation**

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**
This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** Serious risk, Grade 3

## 16. Other information

**Prepared By** Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Creation Date** 04-Feb-2010
**Revision Date** 18-Jan-2018
**Print Date** 18-Jan-2018
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text**

## End of SDS

# SAFETY DATA SHEET

Flammable Liquid Mixture: 1,3,5-Trimethylbenzene / Benzene / Ethyl Benzene / Hexane / M-Xylene / N-Propyl Benzene / O-Xylene / Octane / P-Xylene / Toluene

## Section 1. Identification

**GHS product identifier** : Flammable Liquid Mixture: 1,3,5-Trimethylbenzene / Benzene / Ethyl Benzene / Hexane / M-Xylene / N-Propyl Benzene / O-Xylene / Octane / P-Xylene / Toluene

**Other means of identification** : Not available.

**Product use** : Synthetic/Analytical chemistry.

**SDS #** : 017335

**Supplier's details** : Airgas USA, LLC and its affiliates
259 North Radnor-Chester Road
Suite 100
Radnor, PA 19087-5283
1-610-687-5253

**Emergency telephone number (with hours of operation)** : 1-866-734-3438

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 1
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
GERM CELL MUTAGENICITY - Category 1B
CARCINOGENICITY - Category 1
TOXIC TO REPRODUCTION (Fertility) - Category 2
TOXIC TO REPRODUCTION (Unborn child) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (bone marrow) - Category 1
AQUATIC HAZARD (ACUTE) - Category 2
AQUATIC HAZARD (LONG-TERM) - Category 2

**GHS label elements**

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Extremely flammable liquid and vapor.
May form explosive mixtures in Air.
Causes serious eye irritation.
Causes skin irritation.
May cause genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
May cause drowsiness and dizziness.
Causes damage to organs through prolonged or repeated exposure. (bone marrow)
Toxic to aquatic life with long lasting effects.

# Section 2. Hazards identification

## Precautionary statements

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

**Response** : Collect spillage. Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**Storage** : Store locked up. Store in a well-ventilated place. Keep cool.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified** : None known.

# Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

## CAS number/other identifiers

**CAS number** : Not applicable.

**Product code** : 017335

| Ingredient name | % | CAS number |
|---|---|---|
| toluene | 10 - 20 | 108-88-3 |
| benzene | 10 - 20 | 71-43-2 |
| n-hexane | 10 - 20 | 110-54-3 |
| octane | 10 - 20 | 111-65-9 |
| m-xylene | 8 - 15 | 108-38-3 |
| o-xylene | 8 - 15 | 95-47-6 |
| p-xylene | 8 - 15 | 106-42-3 |
| ethylbenzene | 1 - 5 | 100-41-4 |
| mesitylene | 1 - 5 | 108-67-8 |
| propylbenzene | 1 - 5 | 103-65-1 |

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

# Section 4. First aid measures

## Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.

**Skin contact** : Causes skin irritation.

**Frostbite** : Try to warm up the frozen tissues and seek medical attention.

**Ingestion** : Can cause central nervous system (CNS) depression.

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:, pain or irritation, watering, redness

**Inhalation** : Adverse symptoms may include the following:, nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness, reduced fetal weight, increase in fetal deaths, skeletal malformations

**Skin contact** : Adverse symptoms may include the following:, irritation, redness, reduced fetal weight, increase in fetal deaths, skeletal malformations

**Ingestion** : Adverse symptoms may include the following:, reduced fetal weight, increase in fetal deaths, skeletal malformations

## Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

# Section 4. First aid measures

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**See toxicological information (Section 11)**

# Section 5. Fire-fighting measures

## Extinguishing media

**Suitable extinguishing media** : Use dry chemical, $CO_2$, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : Extremely flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# Section 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

## Methods and materials for containment and cleaning up

# Section 6. Accidental release measures

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

# Section 8. Exposure controls/personal protection

| Ingredient name | Exposure limits |
|---|---|
| octane | **OSHA PEL 1989 (United States, 3/1989).**<br>TWA: 300 ppm 8 hours.<br>TWA: 1450 mg/m³ 8 hours.<br>STEL: 375 ppm 15 minutes.<br>STEL: 1800 mg/m³ 15 minutes.<br>**NIOSH REL (United States, 10/2013).**<br>TWA: 75 ppm 10 hours.<br>TWA: 350 mg/m³ 10 hours.<br>CEIL: 385 ppm 15 minutes.<br>CEIL: 1800 mg/m³ 15 minutes.<br>**ACGIH TLV (United States, 3/2015).**<br>TWA: 300 ppm 8 hours.<br>**OSHA PEL (United States, 2/2013).**<br>TWA: 500 ppm 8 hours.<br>TWA: 2350 mg/m³ 8 hours. |
| n-hexane | **ACGIH TLV (United States, 3/2015).**<br>**Absorbed through skin.**<br>TWA: 50 ppm 8 hours.<br>**NIOSH REL (United States, 10/2013).**<br>TWA: 180 mg/m³ 10 hours.<br>TWA: 50 ppm 10 hours.<br>**OSHA PEL (United States, 2/2013).**<br>TWA: 1800 mg/m³ 8 hours.<br>TWA: 500 ppm 8 hours.<br>**OSHA PEL 1989 (United States, 3/1989).**<br>TWA: 180 mg/m³ 8 hours.<br>TWA: 50 ppm 8 hours. |
| benzene | **ACGIH TLV (United States, 3/2015).**<br>**Absorbed through skin.**<br>STEL: 8 mg/m³ 15 minutes.<br>STEL: 2.5 ppm 15 minutes.<br>TWA: 1.6 mg/m³ 8 hours.<br>TWA: 0.5 ppm 8 hours.<br>**NIOSH REL (United States, 10/2013).**<br>STEL: 1 ppm 15 minutes.<br>TWA: 0.1 ppm 10 hours.<br>**OSHA PEL (United States, 2/2013).**<br>STEL: 5 ppm 15 minutes.<br>TWA: 1 ppm 8 hours.<br>**OSHA PEL 1989 (United States, 3/1989).**<br>STEL: 5 ppm 15 minutes.<br>TWA: 1 ppm 8 hours.<br>**OSHA PEL Z2 (United States, 2/2013).**<br>AMP: 50 ppm 10 minutes.<br>CEIL: 25 ppm<br>TWA: 10 ppm 8 hours. |
| toluene | **ACGIH TLV (United States, 3/2015).**<br>TWA: 20 ppm 8 hours.<br>**NIOSH REL (United States, 10/2013).**<br>STEL: 560 mg/m³ 15 minutes.<br>STEL: 150 ppm 15 minutes.<br>TWA: 375 mg/m³ 10 hours.<br>TWA: 100 ppm 10 hours.<br>**OSHA PEL 1989 (United States, 3/1989).**<br>STEL: 560 mg/m³ 15 minutes.<br>STEL: 150 ppm 15 minutes. |

## Section 8. Exposure controls/personal protection

| | |
|---|---|
| | TWA: 375 mg/m³ 8 hours.<br>TWA: 100 ppm 8 hours.<br>**OSHA PEL Z2 (United States, 2/2013).**<br>AMP: 500 ppm 10 minutes.<br>CEIL: 300 ppm<br>TWA: 200 ppm 8 hours. |
| p-xylene | **NIOSH REL (United States, 10/2013).**<br>STEL: 655 mg/m³ 15 minutes.<br>STEL: 150 ppm 15 minutes.<br>TWA: 435 mg/m³ 10 hours.<br>TWA: 100 ppm 10 hours.<br>**OSHA PEL (United States, 2/2013).**<br>TWA: 435 mg/m³ 8 hours.<br>TWA: 100 ppm 8 hours.<br>**OSHA PEL 1989 (United States, 3/1989).**<br>STEL: 655 mg/m³ 15 minutes.<br>STEL: 150 ppm 15 minutes.<br>TWA: 435 mg/m³ 8 hours.<br>TWA: 100 ppm 8 hours.<br>**ACGIH TLV (United States, 3/2015).**<br>TWA: 100 ppm 8 hours.<br>TWA: 434 mg/m³ 8 hours.<br>STEL: 150 ppm 15 minutes.<br>STEL: 651 mg/m³ 15 minutes. |
| o-xylene | **NIOSH REL (United States, 10/2013).**<br>STEL: 655 mg/m³ 15 minutes.<br>STEL: 150 ppm 15 minutes.<br>TWA: 435 mg/m³ 10 hours.<br>TWA: 100 ppm 10 hours.<br>**OSHA PEL (United States, 2/2013).**<br>TWA: 435 mg/m³ 8 hours.<br>TWA: 100 ppm 8 hours.<br>**OSHA PEL 1989 (United States, 3/1989).**<br>STEL: 655 mg/m³ 15 minutes.<br>STEL: 150 ppm 15 minutes.<br>TWA: 435 mg/m³ 8 hours.<br>TWA: 100 ppm 8 hours.<br>**ACGIH TLV (United States, 3/2015).**<br>TWA: 100 ppm 8 hours.<br>TWA: 434 mg/m³ 8 hours.<br>STEL: 150 ppm 15 minutes.<br>STEL: 651 mg/m³ 15 minutes. |
| m-xylene | **NIOSH REL (United States, 10/2013).**<br>STEL: 655 mg/m³ 15 minutes.<br>STEL: 150 ppm 15 minutes.<br>TWA: 435 mg/m³ 10 hours.<br>TWA: 100 ppm 10 hours.<br>**OSHA PEL (United States, 2/2013).**<br>TWA: 435 mg/m³ 8 hours.<br>TWA: 100 ppm 8 hours.<br>**OSHA PEL 1989 (United States, 3/1989).**<br>STEL: 655 mg/m³ 15 minutes.<br>STEL: 150 ppm 15 minutes.<br>TWA: 435 mg/m³ 8 hours.<br>TWA: 100 ppm 8 hours.<br>**ACGIH TLV (United States, 3/2015).**<br>TWA: 100 ppm 8 hours.<br>TWA: 434 mg/m³ 8 hours. |

# Section 8. Exposure controls/personal protection

| | |
|---|---|
| mesitylene | STEL: 150 ppm 15 minutes.<br>STEL: 651 mg/m³ 15 minutes.<br>**ACGIH TLV (United States, 3/2015).**<br>TWA: 25 ppm 8 hours.<br>TWA: 123 mg/m³ 8 hours.<br>**OSHA PEL 1989 (United States, 3/1989).**<br>TWA: 25 ppm 8 hours.<br>TWA: 125 mg/m³ 8 hours.<br>**NIOSH REL (United States, 10/2013).**<br>TWA: 25 ppm 10 hours.<br>TWA: 125 mg/m³ 10 hours. |
| ethylbenzene | **ACGIH TLV (United States, 3/2015).**<br>TWA: 20 ppm 8 hours.<br>**NIOSH REL (United States, 10/2013).**<br>STEL: 545 mg/m³ 15 minutes.<br>STEL: 125 ppm 15 minutes.<br>TWA: 435 mg/m³ 10 hours.<br>TWA: 100 ppm 10 hours.<br>**OSHA PEL (United States, 2/2013).**<br>TWA: 435 mg/m³ 8 hours.<br>TWA: 100 ppm 8 hours.<br>**OSHA PEL 1989 (United States, 3/1989).**<br>STEL: 545 mg/m³ 15 minutes.<br>STEL: 125 ppm 15 minutes.<br>TWA: 435 mg/m³ 8 hours.<br>TWA: 100 ppm 8 hours. |

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

## Section 8. Exposure controls/personal protection

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

**Appearance**

**Physical state** : Liquid.

**Color** : Not available.

**Boiling/condensation point** : Lowest known value: 68.73°C (155.7°F) (n-hexane). Weighted average: 116.6°C (241.9°F)

**Melting/freezing point** : May start to solidify at the following temperature: 13.2°C (55.8°F) This is based on data for the following ingredient: p-xylene. Weighted average: -49.47°C (-57°F)

**Critical temperature** : Lowest known value: 234.25°C (453.6°F) (n-hexane).

**Odor** : Not available.

**Odor threshold** : Not available.

**pH** : Not available.

**Flash point** : Not available.

**Burning time** : Not applicable.

**Burning rate** : Not applicable.

**Evaporation rate** : Not available.

**Flammability (solid, gas)** : Not available.

**Lower and upper explosive (flammable) limits** : Not available.

**Vapor pressure** : Not available.

**Vapor density** : Highest known value: 4.1 (Air = 1) (mesitylene). Weighted average: 3.43 (Air = 1)

**Gas Density (lb/ft $^3$)** : Weighted average: 0.81

**Relative density** : Not available.

**Solubility** : Not available.

**Solubility in water** : Not available.

**Partition coefficient: n-octanol/water** : Not available.

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.

**SADT** : Not available.

**Viscosity** : Not available.

# Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

**Incompatibility with various substances** : Extremely reactive or incompatible with the following materials: oxidizing materials. Highly reactive or incompatible with the following materials: acids.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

# Section 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| octane | LC50 Inhalation Gas. | Rat | 25260 ppm | 4 hours |
| | LC50 Inhalation Vapor | Rat | 118 g/m³ | 4 hours |
| n-hexane | LC50 Inhalation Gas. | Rat | 48000 ppm | 4 hours |
| | LC50 Inhalation Vapor | Rat | 96000 ppm | 1 hours |
| | LD50 Oral | Rat | 15840 mg/kg | - |
| benzene | LC50 Inhalation Gas. | Rat | 10000 ppm | 7 hours |
| | LD50 Oral | Rat | 930 mg/kg | - |
| toluene | LC50 Inhalation Vapor | Rat | 28830 ppm | 1 hours |
| | LC50 Inhalation Vapor | Rat | 49 g/m³ | 4 hours |
| p-xylene | LC50 Inhalation Gas. | Rat | 9100 ppm | 1 hours |
| | LC50 Inhalation Gas. | Rat | 4550 ppm | 4 hours |
| | LD50 Oral | Rat | 3910 mg/kg | - |
| o-xylene | LC50 Inhalation Gas. | Mouse | 8736 ppm | 1 hours |
| | LC50 Inhalation Gas. | Rat | 13400 ppm | 1 hours |
| | LD50 Oral | Rat | 3567 mg/kg | - |
| m-xylene | LD50 Oral | Rat | 4988 mg/kg | - |
| propylbenzene | LC50 Inhalation Vapor | Rat | 91910 ppm | 1 hours |
| | LD50 Oral | Rat | 6040 mg/kg | - |
| mesitylene | LC50 Inhalation Vapor | Rat | 24000 mg/m³ | 4 hours |
| | LD50 Oral | Rat | 5000 mg/kg | - |
| ethylbenzene | LD50 Dermal | Rabbit | >5000 mg/kg | - |
| | LD50 Oral | Rat | 3500 mg/kg | - |

### Irritation/Corrosion

# Section 11. Toxicological information

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| n-hexane | Eyes - Mild irritant | Rabbit | - | 10 milligrams | - |
| benzene | Eyes - Moderate irritant | Rabbit | - | 88 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 2 milligrams | - |
| | Skin - Mild irritant | Rat | - | 8 hours 60 microliters | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 15 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |
| toluene | Eyes - Mild irritant | Rabbit | - | 0.5 minutes 100 milligrams | - |
| | Eyes - Mild irritant | Rabbit | - | 870 Micrograms | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 2 milligrams | - |
| | Skin - Mild irritant | Pig | - | 24 hours 250 microliters | - |
| | Skin - Mild irritant | Rabbit | - | 435 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 500 milligrams | - |
| m-xylene | Eyes - Severe irritant | Rabbit | - | 24 hours 5 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |
| | Skin - Severe irritant | Rabbit | - | 24 hours 10 Micrograms | - |
| mesitylene | Eyes - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |
| ethylbenzene | Eyes - Severe irritant | Rabbit | - | 500 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 15 milligrams | - |

## Sensitization

Not available.

## Mutagenicity

Not available.

## Carcinogenicity

Not available.

## Classification

# Section 11. Toxicological information

| Product/ingredient name | OSHA | IARC | NTP |
|---|---|---|---|
| toluene | - | 3 | - |
| benzene | + | 1 | Known to be a human carcinogen. |
| m-xylene | - | 3 | - |
| o-xylene | - | 3 | - |
| p-xylene | - | 3 | - |
| ethylbenzene | - | 2B | - |

## Reproductive toxicity

Not available.

## Teratogenicity

Not available.

## Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| octane | Category 3 | Not applicable. | Narcotic effects |
| n-hexane | Category 3 | Not applicable. | Narcotic effects |
| toluene | Category 3 | Not applicable. | Narcotic effects |
| propylbenzene | Category 3 | Not applicable. | Respiratory tract irritation |
| mesitylene | Category 3 | Not applicable. | Respiratory tract irritation |

## Specific target organ toxicity (repeated exposure)

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| n-hexane | Category 2 | Not determined | Not determined |
| benzene | Category 1 | Not determined | bone marrow |
| toluene | Category 2 | Not determined | Not determined |

## Aspiration hazard

| Name | Result |
|---|---|
| octane | ASPIRATION HAZARD - Category 1 |
| propylbenzene | ASPIRATION HAZARD - Category 1 |
| ethylbenzene | ASPIRATION HAZARD - Category 1 |

**Information on the likely routes of exposure** : Not available.

## Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.

**Skin contact** : Causes skin irritation.

**Ingestion** : Can cause central nervous system (CNS) depression.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:, pain or irritation, watering, redness

**Inhalation** : Adverse symptoms may include the following:, nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness, reduced fetal weight, increase in fetal deaths, skeletal malformations

# Section 11. Toxicological information

**Skin contact** : Adverse symptoms may include the following:, irritation, redness, reduced fetal weight, increase in fetal deaths, skeletal malformations

**Ingestion** : Adverse symptoms may include the following:, reduced fetal weight, increase in fetal deaths, skeletal malformations

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : Causes damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : May cause genetic defects.

**Teratogenicity** : Suspected of damaging the unborn child.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : Suspected of damaging fertility.

## Numerical measures of toxicity

### Acute toxicity estimates

| Route | ATE value |
|---|---|
| Oral | 10387.8 mg/kg |
| Dermal | 3422.2 mg/kg |
| Inhalation (gases) | 25291.3 ppm |
| Inhalation (vapors) | 77 mg/l |

# Section 12. Ecological information

## Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| n-hexane | Acute LC50 113000 µg/l Fresh water | Fish - Oreochromis mossambicus | 96 hours |
| benzene | Acute EC50 29000 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 1600000 µg/l Fresh water | Algae - Selenastrum sp. | 96 hours |
| | Acute EC50 9230 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 21000 µg/l Marine water | Crustaceans - Artemia salina - Nauplii | 48 hours |
| | Acute LC50 5.28 ul/L Fresh water | Fish - Oncorhynchus gorbuscha - Fry | 96 hours |
| | Chronic NOEC 98 mg/l Fresh water | Daphnia - Daphnia magna | 21 days |
| | Chronic NOEC 1.5 to 5.4 ul/L Marine | Fish - Morone saxatilis - Juvenile | 4 weeks |

# Section 12. Ecological information

| | | | |
|---|---|---|---|
| | water | (Fledgling, Hatchling, Weanling) | |
| toluene | Acute EC50 12500 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 11600 µg/l Fresh water | Crustaceans - Gammarus pseudolimnaeus - Adult | 48 hours |
| | Acute EC50 6000 µg/l Fresh water | Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling) | 48 hours |
| | Acute LC50 5500 µg/l Fresh water | Fish - Oncorhynchus kisutch - Fry | 96 hours |
| | Chronic NOEC 1000 µg/l Fresh water | Daphnia - Daphnia magna | 21 days |
| p-xylene | Acute EC50 3200 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 4730 to 6310 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 2 ul/L Marine water | Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling) | 96 hours |
| o-xylene | Acute EC50 4700 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 1390 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 38000 µg/l Marine water | Crustaceans - Cancer magister - Zoea | 48 hours |
| | Acute LC50 7600 µg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours |
| m-xylene | Acute EC50 4900 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 5770 to 7640 µg/l Fresh water | Crustaceans - Artemia sp. - Nauplii | 48 hours |
| | Acute LC50 23600 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 8400 µg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours |
| propylbenzene | Acute EC50 1800 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute LC50 1550 µg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours |
| mesitylene | Acute LC50 13000 µg/l Marine water | Crustaceans - Cancer magister - Zoea | 48 hours |
| | Acute LC50 12520 µg/l Fresh water | Fish - Carassius auratus | 96 hours |
| | Chronic NOEC 400 µg/l Fresh water | Daphnia - Daphnia magna | 21 days |
| ethylbenzene | Acute EC50 4600 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 72 hours |
| | Acute EC50 3600 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 96 hours |
| | Acute EC50 2930 to 4400 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 40000 µg/l Marine water | Crustaceans - Cancer magister - Zoea | 48 hours |
| | Acute LC50 4200 µg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours |

## Persistence and degradability

Not available.

## Bioaccumulative potential

# Section 12. Ecological information

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| octane | 5.18 | 198.7 | low |
| n-hexane | 4 | 501.187 | high |
| benzene | 2.13 | 11 | low |
| toluene | 2.73 | 90 | low |
| p-xylene | 3.15 | 8.1 to 25.9 | low |
| o-xylene | 3.12 | 8.1 to 25.9 | low |
| m-xylene | 3.2 | 8.1 to 25.9 | low |
| propylbenzene | 3.69 | - | low |
| mesitylene | 3.42 | 161 | low |
| ethylbenzene | 3.6 | - | low |

**Mobility in soil**

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

# Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

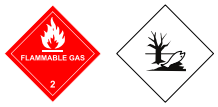
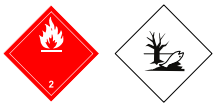
**United States - RCRA Toxic hazardous waste "U" List**

| Ingredient | CAS # | Status | Reference number |
|---|---|---|---|
| Benzene (I,T) | 71-43-2 | Listed | U019 |
| Toluene; Benzene, methyl- | 108-88-3 | Listed | U220 |
| Xylene | 108-38-3 | Listed | U239 |
| Xylene | 95-47-6 | Listed | U239 |
| Xylene | 106-42-3 | Listed | U239 |

# Section 14. Transport information

| | DOT | TDG | Mexico | IMDG | IATA |
|---|---|---|---|---|---|
| **UN number** | UN3161 | UN3161 | UN3161 | UN3161 | UN3161 |
| **UN proper shipping name** | Liquefied gas, flammable n.o.s. (Toluene, Hexane) | Liquefied gas, flammable n.o.s. (Toluene, Hexane) | Liquefied gas, flammable n.o.s. (Toluene, Hexane) | Liquefied gas, flammable n.o.s. (Toluene, Hexane) | Liquefied gas, flammable n.o.s. (Toluene, Hexane) |
| | | | | | |

# Section 14. Transport information

| | | | | | |
|---|---|---|---|---|---|
| **Transport hazard class(es)** | 2.1   | 2.1   | 2.1   | 2.1   | 2.1   |
| **Packing group** | - | - | - | - | - |
| **Environment** | No. | No. | No. | Yes. | No. |
| **Additional information** | This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.<br><br>**Reportable quantity**<br>50 lbs / 22.7 kg<br>Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2), 2.7 (Marine pollutant mark).<br><br>The marine pollutant mark is not required when transported by road or rail.<br><br>**Explosive Limit and Limited Quantity Index**<br>0.125<br><br>**ERAP Index**<br>3000<br><br>**Passenger Carrying Ship Index**<br>Forbidden<br><br>**Passenger Carrying Road or Rail Index**<br>Forbidden | - | The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. | The environmentally hazardous substance mark may appear if required by other transportation regulations. |

**"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."**

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

# Section 15. Regulatory information

**U.S. Federal regulations** :
**TSCA 8(a) PAIR**: p-xylene
**TSCA 8(a) CDR Exempt/Partial exemption**: Not determined
**United States inventory (TSCA 8b)**: All components are listed or exempted.
**Clean Water Act (CWA) 307**: benzene; toluene; ethylbenzene
**Clean Water Act (CWA) 311**: benzene; toluene; m-xylene; o-xylene; p-xylene; ethylbenzene

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

# Section 15. Regulatory information

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Listed

## SARA 302/304

### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

## SARA 311/312

**Classification** : Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

### Composition/information on ingredients

| Name | % | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|---|---|---|---|---|---|---|
| octane | 10 - 20 | Yes. | No. | No. | Yes. | No. |
| n-hexane | 10 - 20 | Yes. | No. | No. | Yes. | Yes. |
| benzene | 10 - 20 | Yes. | No. | No. | Yes. | Yes. |
| toluene | 10 - 20 | Yes. | No. | No. | Yes. | Yes. |
| p-xylene | 8 - 15 | Yes. | No. | No. | Yes. | No. |
| o-xylene | 8 - 15 | Yes. | No. | No. | Yes. | No. |
| m-xylene | 8 - 15 | Yes. | No. | No. | Yes. | No. |
| propylbenzene | 1 - 5 | Yes. | No. | No. | Yes. | No. |
| mesitylene | 1 - 5 | Yes. | No. | No. | Yes. | No. |
| ethylbenzene | 1 - 5 | Yes. | No. | No. | Yes. | No. |

## SARA 313

| | Product name | CAS number | % |
|---|---|---|---|
| **Form R - Reporting requirements** | toluene<br>benzene<br>n-hexane<br>m-xylene<br>o-xylene<br>p-xylene<br>ethylbenzene | 108-88-3<br>71-43-2<br>110-54-3<br>108-38-3<br>95-47-6<br>106-42-3<br>100-41-4 | 10 - 20<br>10 - 20<br>10 - 20<br>8 - 15<br>8 - 15<br>8 - 15<br>1 - 5 |
| **Supplier notification** | toluene<br>benzene<br>n-hexane<br>m-xylene<br>o-xylene<br>p-xylene<br>ethylbenzene | 108-88-3<br>71-43-2<br>110-54-3<br>108-38-3<br>95-47-6<br>106-42-3<br>100-41-4 | 10 - 20<br>10 - 20<br>10 - 20<br>8 - 15<br>8 - 15<br>8 - 15<br>1 - 5 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

## State regulations

# Section 15. Regulatory information

**Massachusetts** : The following components are listed: OCTANE; HEXANE; BENZENE; TOLUENE; M-XYLENE; O-XYLENE; P-XYLENE; ETHYL BENZENE; mesitylene; PROPYLBENZENE

**New York** : The following components are listed: Hexane; Benzene; Toluene; m-Xylene; o-Xylene; p-Xylene; Ethylbenzene

**New Jersey** : The following components are listed: OCTANE; n-HEXANE; HEXANE; BENZENE; TOLUENE; BENZENE, METHYL-; m-XYLENE; BENZENE, 1,3-DIMETHYL-; o-XYLENE; BENZENE, 1,2-DIMETHYL-; p-XYLENE; BENZENE, 1,4-DIMETHYL-; ETHYL BENZENE; BENZENE, ETHYL-; mesitylene; PROPYL BENZENE; BENZENE, PROPYL-

**Pennsylvania** : The following components are listed: OCTANE; HEXANE; BENZENE; BENZENE, METHYL-; BENZENE, 1,3-DIMETHYL-; BENZENE, 1,2-DIMETHYL-; BENZENE, 1, 4-DIMETHYL-; BENZENE, ETHYL-; mesitylene; BENZENE, PROPYL-

## California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

| Ingredient name | Cancer | Reproductive | No significant risk level | Maximum acceptable dosage level |
|---|---|---|---|---|
| toluene | No. | Yes. | No. | 7000 µg/day (ingestion) |
| benzene | Yes. | Yes. | 6.4 µg/day (ingestion)<br>13 µg/day (inhalation) | 24 µg/day (ingestion)<br>49 µg/day (inhalation) |
| ethylbenzene | Yes. | No. | 41 µg/day (ingestion)<br>54 µg/day (inhalation) | No. |

**Canada inventory** : All components are listed or exempted.

## International regulations

**International lists** : **Australia inventory (AICS)**: All components are listed or exempted.
**China inventory (IECSC)**: All components are listed or exempted.
**Japan inventory**: All components are listed or exempted.
**Korea inventory**: All components are listed or exempted.
**Malaysia Inventory (EHS Register)**: Not determined.
**New Zealand Inventory of Chemicals (NZIoC)**: All components are listed or exempted.
**Philippines inventory (PICCS)**: All components are listed or exempted.
**Taiwan inventory (CSNN)**: All components are listed or exempted.

## Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

## Montreal Protocol (Annexes A, B, C, E)

Not listed.

## Stockholm Convention on Persistent Organic Pollutants

Not listed.

## Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

## UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

## Canada

# Section 15. Regulatory information

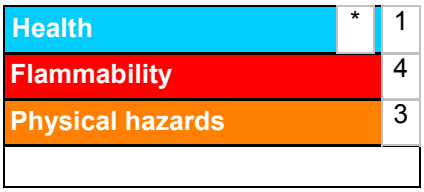
**WHMIS (Canada)** : Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

**CEPA Toxic substances**: The following components are listed: Benzene
**Canadian ARET**: None of the components are listed.
**Canadian NPRI**: The following components are listed: Octane (all isomers); n-Hexane; Benzene; Toluene; Xylene (all isomers); Xylene (all isomers); Xylene (all isomers); Ethylbenzene; Trimethylbenzene
**Alberta Designated Substances**: None of the components are listed.
**Ontario Designated Substances**: None of the components are listed.
**Quebec Designated Substances**: None of the components are listed.

# Section 16. Other information

**Canada Label requirements** : Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

## Hazardous Material Information System (U.S.A.)




**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.**

**The customer is responsible for determining the PPE code for this material.**

## National Fire Protection Association (U.S.A.)




**Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.**

**Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.**

## History

**Date of printing** : 3/16/2016

**Date of issue/Date of revision** : 3/16/2016

**Date of previous issue** : No previous validation

**Version** : 1

# Section 16. Other information

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United NationsACGIH – American Conference of Governmental Industrial Hygienists
AIHA – American Industrial Hygiene Association
CAS – Chemical Abstract Services
CEPA – Canadian Environmental Protection Act
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act (EPA)
CFR – United States Code of Federal Regulations
CPR – Controlled Products Regulations
DSL – Domestic Substances List
GWP – Global Warming Potential
IARC – International Agency for Research on Cancer
ICAO – International Civil Aviation Organisation
Inh – Inhalation
LC – Lethal concentration
LD – Lethal dosage
NDSL – Non-Domestic Substances List
NIOSH – National Institute for Occupational Safety and Health
TDG – Canadian Transportation of Dangerous Goods Act and Regulations
TLV – Threshold Limit Value
TSCA – Toxic Substances Control Act
WEEL – Workplace Environmental Exposure Level
WHMIS – Canadian Workplace Hazardous Material Information System

**References** : Not available.

**Indicates information that has changed from previously issued version.**

## Notice to reader

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**
**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**

# SAFETY DATA SHEET

Version 4.7
Revision Date 06/18/2015
Print Date 02/09/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : 1,3-Dichlorobenzene

Product Number : 113808
Brand : Aldrich
Index-No. : 602-067-00-7

CAS-No. : 541-73-1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 4), H227
Acute toxicity, Oral (Category 4), H302
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)
H227 Combustible liquid.
H302 Harmful if swallowed.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you

| | |
|---|---|
| | feel unwell. Rinse mouth. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |
| P391 | Collect spillage. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $C_6H_4Cl_2$ |
| Molecular weight | : | 147.00 g/mol |
| CAS-No. | : | 541-73-1 |
| EC-No. | : | 208-792-1 |
| Index-No. | : | 602-067-00-7 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **1,3-Dichlorobenzene** | | |
| | Flam. Liq. 4; Acute Tox. 4; Aquatic Acute 2; Aquatic Chronic 2; H227, H302, H411 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Combustible liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm

Break through time: 37 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid, clear<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -25 - -22 °C (-13 - -8 °F) - lit. |
| f) | Initial boiling point and boiling range | 172 - 173 °C (342 - 343 °F) - lit. |
| g) | Flash point | 67.0 °C (152.6 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 1.288 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 5 |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |

t) Oxidizing properties No data available

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
Heat, flames and sparks.

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
No data available

Inhalation: No data available

Dermal: No data available

LD50 Intraperitoneal - Mouse - 1,062 mg/kg

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (1,3-Dichlorobenzene)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: CZ4499000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Pimephales promelas (fathead minnow) - 7.8 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | LC50 - Daphnia magna (Water flea) - 1.7 mg/l - 48 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
Bioaccumulation: Pimephales promelas (fathead minnow) - 32 d - 0.3 mg/l

Bioconcentration factor (BCF): 97

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3082 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (1,3-Dichlorobenzene)
Reportable Quantity (RQ): 100 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 3082 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,3-Dichlorobenzene)
Marine pollutant:yes

**IATA**
UN number: 3082 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (1,3-Dichlorobenzene)

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| 1,3-Dichlorobenzene | 541-73-1 | 2007-07-01 |

**SARA 311/312 Hazards**
Fire Hazard, Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,3-Dichlorobenzene | 541-73-1 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,3-Dichlorobenzene | 541-73-1 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,3-Dichlorobenzene | 541-73-1 | 2007-07-01 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Flam. Liq. | Flammable liquids |
| H227 | Combustible liquid. |
| H302 | Harmful if swallowed. |
| H401 | Toxic to aquatic life. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 1 |
| Chronic Health Hazard: | |
| Flammability: | 2 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 1 |
| Fire Hazard: | 2 |
| Reactivity Hazard: | 0 |

**Further information**
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**
Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.7 Revision Date: 06/18/2015 Print Date: 02/09/2016

# SAFETY DATA SHEET

Version 4.4
Revision Date 04/24/2015
Print Date 04/01/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : 1,4-Dichlorobenzene

Product Number : D56829
Brand : Aldrich
Index-No. : 602-035-00-2

CAS-No. : 106-46-7

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Eye irritation (Category 2A), H319
Carcinogenicity (Category 2), H351
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.

| | |
|---|---|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $C_6H_4Cl_2$ |
| Molecular weight | : | 147.00 g/mol |
| CAS-No. | : | 106-46-7 |
| EC-No. | : | 203-400-5 |
| Index-No. | : | 602-035-00-2 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **1,4-Dichlorobenzene** | | |
| | Eye Irrit. 2A; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H319, H351, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| 1,4-Dichlorobenzene | 106-46-7 | TWA | 10.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Eye irritation<br>Kidney damage<br>Confirmed animal carcinogen with unknown relevance to humans | | |
| | | Potential Occupational Carcinogen<br>See Appendix A | | |
| | | TWA | 75.000000 ppm<br>450.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | The value in mg/m3 is approximate. | | |

### 8.2 Exposure controls

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: sheets<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 52 - 54 °C (126 - 129 °F) - lit. |
| f) | Initial boiling point and boiling range | 173 °C (343 °F) - lit. |
| g) | Flash point | 66.0 °C (150.8 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | 8.8 hPa (6.6 mmHg) at 50.0 °C (122.0 °F)<br>0.5 hPa (0.4 mmHg) at 25.0 °C (77.0 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 1.241 g/mL at 25 °C (77 °F) |
| n) | Water solubility | No data available |

| | | |
|---|---|---|
| o) | Partition coefficient: n-octanol/water | log Pow: 3.40 |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**

| | |
|---|---|
| Bulk density | 650 kg/m3 |

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD0 Oral - Rat - male and female - > 2,000 mg/kg
(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 5.07 mg/l

LD0 Dermal - Rat - > 2,000 mg/kg
(OECD Test Guideline 402)

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: No skin irritation
(OECD Test Guideline 404)

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: No eye irritation
(OECD Test Guideline 405)

**Respiratory or skin sensitisation**
Maximisation Test (GPMT) - Guinea pig
Did not cause sensitisation on laboratory animals.
(OECD Test Guideline 406)

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (1,4-Dichlorobenzene) |
| NTP: | Reasonably anticipated to be a human carcinogen (1,4-Dichlorobenzene) |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: CZ4550000

Produces:, methemoglobin, Nausea, Vomiting, Increased pulse rate, Headache, Impairment of vision

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | flow-through test LC50 - Salmo gairdneri - 1.12 mg/l - 96 h |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Daphnia magna (Water flea) - 0.7 mg/l - 48 h |
| Toxicity to algae | Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 1.6 mg/l - 96 h |

### 12.2 Persistence and degradability

| | |
|---|---|
| Biodegradability | aerobic - Exposure time 28 d<br>Result: 30 % - Not rapidly biodegradable<br>(OECD Test Guideline 301C) |

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Jordanella floridae - 5 d<br>- 2.68 µg/l<br><br>Bioconcentration factor (BCF): 296 |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (1,4-Dichlorobenzene)
Reportable Quantity (RQ): 100 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,4-Dichlorobenzene)
Marine pollutant:yes

**IATA**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (1,4-Dichlorobenzene)

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| 1,4-Dichlorobenzene | 106-46-7 | 2007-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,4-Dichlorobenzene | 106-46-7 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,4-Dichlorobenzene | 106-46-7 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,4-Dichlorobenzene | 106-46-7 | 2007-07-01 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| 1,4-Dichlorobenzene | 106-46-7 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| Eye Irrit. | Eye irritation |
| H319 | Causes serious eye irritation. |
| H351 | Suspected of causing cancer. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Fire Hazard: | 2 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.4 Revision Date: 04/24/2015 Print Date: 04/01/2016

# SAFETY DATA SHEET

Version 5.4
Revision Date 03/03/2015
Print Date 04/11/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : 1,4-Dioxane

Product Number : 296309
Brand : Sigma-Aldrich
Index-No. : 603-024-00-5

CAS-No. : 123-91-1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 2), H225
Eye irritation (Category 2A), H319
Carcinogenicity (Category 2), H351
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.

| | |
|---|---|
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P281 | Use personal protective equipment as required. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 + P312 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

May form explosive peroxides., Repeated exposure may cause skin dryness or cracking.
May form explosive peroxides.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| | | |
|---|---|---|
| Synonyms | : | Dioxane<br>Diethylene oxide |
| Formula | : | $C_4H_8O_2$ |
| Molecular weight | : | 88.11 g/mol |
| CAS-No. | : | 123-91-1 |
| EC-No. | : | 204-661-8 |
| Index-No. | : | 603-024-00-5 |
| Registration number | : | 01-2119462837-26-XXXX |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **1,4-Dioxane** | | |
| | Flam. Liq. 2; Eye Irrit. 2A; Carc. 2; STOT SE 3; H225, H319, H335, H351 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Use explosion-proof equipment.Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Flammable liquids

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| 1,4-Dioxane | 123-91-1 | TWA | 20.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Liver damage<br>Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |
| | | TWA | 20 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Liver damage<br>Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |
| | | TWA | 25 ppm<br>90 mg/m3 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| | | Skin notation | | |
| | | TWA | 100.000000 ppm<br>360.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Skin designation<br>The value in mg/m3 is approximate. | | |
| | | TWA | 100 ppm<br>360 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Skin designation<br>The value in mg/m3 is approximate. | | |
| | | C | 1.000000 ppm<br>3.600000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix A<br>30 minute ceiling value | | |

**Derived No Effect Level (DNEL)**

| Application Area | Exposure routes | Health effect | Value |
|---|---|---|---|
| Workers | Inhalation | Long-term local effects | 144 mg/m3 |
| Workers | Inhalation | Long-term systemic effects | 73 mg/m3 |
| Workers | Skin contact | Long-term systemic effects | 21 mg/m3 |

**Predicted No Effect Concentration (PNEC)**

| Compartment | Value |
|---|---|
| Soil | 0.153 mg/kg |
| Marine water | 0.67 mg/l |
| Fresh water | 10 mg/l |
| Fresh water sediment | 37 mg/kg |
| Sewage treatment plant | 2700 mg/l |
| Aquatic intermittent release | 10 mg/l |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: butyl-rubber
Minimum layer thickness: 0.3 mm
Break through time: 480 min
Material tested:Butoject® (KCL 897 / Aldrich Z677647, Size M)

Splash contact
Material: Chloroprene
Minimum layer thickness: 0.6 mm
Break through time: 35 min
Material tested:Camapren® (KCL 722 / Aldrich Z677493, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | 6.0 - 8 at 500 g/l at 20 °C (68 °F) |
| e) | Melting point/freezing point | Melting point/range: 10 - 12 °C (50 - 54 °F) - lit. |
| f) | Initial boiling point and boiling range | 100 - 102 °C (212 - 216 °F) - lit. |
| g) | Flash point | 12 °C (54 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 22 %(V)<br>Lower explosion limit: 2 %(V) |
| k) | Vapour pressure | 36 hPa (27 mmHg) at 20 °C (68 °F)<br>53 hPa (40 mmHg) at 25.20 °C (77.36 °F) |
| l) | Vapour density | 3.04 - (Air = 1.0) |

| | | |
|---|---|---|
| m) | Relative density | 1.034 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | completely miscible |
| o) | Partition coefficient: n-octanol/water | log Pow: -0.27 |
| p) | Auto-ignition temperature | 300 °C (572 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**

| | |
|---|---|
| Surface tension | 36.9 mN/m at 25 °C (77 °F) |
| Relative vapour density | 3.04 - (Air = 1.0) |

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.
Test for peroxide formation before distillation or evaporation. Test for peroxide formation or discard after 1 year.
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
Vapours may form explosive mixture with air.Vapours may form explosive mixture with air.

**10.4 Conditions to avoid**
Heat, flames and sparks.

**10.5 Incompatible materials**
Oxygen, Oxidizing agents, Halogens, Reducing agents, Perchlorates., Trimethylaluminum

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 4,200 mg/kg

LC50 Inhalation - Rat - 2 h - 46,000 mg/m3
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Other.

LD50 Dermal - Rabbit - 7,858 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Human
Remarks: Chronic exposure causes drying effect on the skin and eczema.

Skin - Rabbit
Result: No skin irritation

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Eye irritation - 24 h

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
Laboratory experiments have shown mutagenic effects.

**Carcinogenicity**

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (1,4-Dioxane) |
| NTP: | Reasonably anticipated to be a human carcinogen (1,4-Dioxane) |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: JG8225000

Nausea, Vomiting, Weakness, Dizziness, Vertigo, Headache, Sweating, loss of appetite, Kidney injury may occur., Liver injury may occur.
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Liver - Irregularities - Based on Human Evidence
Liver - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Pimephales promelas (fathead minnow) - 985 mg/l - 96 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 8,450 mg/l - 24 h |
| Toxicity to algae | EC50 - Desmodesmus subspicatus (green algae) - > 500 mg/l - 72 h |

### 12.2 Persistence and degradability

| | |
|---|---|
| Biodegradability | Result: < 5 % - Not readily biodegradable. |

### 12.3 Bioaccumulative potential
Does not bioaccumulate.

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

No data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1165 Class: 3 Packing group: II
Proper shipping name: Dioxane
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 1165 Class: 3 Packing group: II EMS-No: F-E, S-D
Proper shipping name: DIOXANE

**IATA**
UN number: 1165 Class: 3 Packing group: II
Proper shipping name: Dioxane

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| 1,4-Dioxane | 123-91-1 | 2007-07-01 |

**SARA 311/312 Hazards**
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,4-Dioxane | 123-91-1 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,4-Dioxane | 123-91-1 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,4-Dioxane | 123-91-1 | 2007-07-01 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| 1,4-Dioxane | 123-91-1 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Carc. | Carcinogenicity |
| Eye Irrit. | Eye irritation |
| Flam. Liq. | Flammable liquids |
| H225 | Highly flammable liquid and vapour. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer. |
| STOT SE | Specific target organ toxicity - single exposure |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 3 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.4 Revision Date: 03/03/2015 Print Date: 04/11/2016

# SAFETY DATA SHEET

Version 3.7
Revision Date 03/03/2015
Print Date 05/28/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : 2,4-Dichlorophenol

Product Number : 105953
Brand : Aldrich
Index-No. : 604-011-00-7

CAS-No. : 120-83-2

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 2), H300
Acute toxicity, Dermal (Category 3), H311
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H300 Fatal if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P260 Do not breathe dust or mist.
P264 Wash skin thoroughly after handling.

| | |
|---|---|
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. |
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 + P310 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. |
| P305 + P351 + P338 + P310 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | $C_6H_4Cl_2O$ |
| Molecular weight | : | 163.00 g/mol |
| CAS-No. | : | 120-83-2 |
| EC-No. | : | 204-429-6 |
| Index-No. | : | 604-011-00-7 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **2,4-Dichlorophenol** | | |
| | Acute Tox. 2; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Aquatic Acute 2; Aquatic Chronic 2; H300, H311, H314, H411 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.Continue rinsing eyes during transport to hospital.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| 2,4-Dichlorophenol | 120-83-2 | TWA | 1.000000 ppm | USA. Workplace Environmental Exposure Levels (WEEL) |
| | Remarks | Skin<br>Absorbed rapidly through the skin in molten or heated liquid form in | | |

| | | |
|---|---|---|
| | | amounts that have caused rapid death in humans |

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: crystalline<br>Colour: light brown |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 42 - 43 °C (108 - 109 °F) - lit. |
| f) | Initial boiling point and boiling range | 209 - 210 °C (408 - 410 °F) - lit. |

| | | |
|---|---|---|
| g) | Flash point | 114.0 °C (237.2 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | 0.1 hPa (0.1 mmHg) at 25.0 °C (77.0 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 1.38 g/cm3 at 60.00 °C (140.00 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 3.06log Pow: 5 |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Oxidizing agents, acids, Acid chlorides, Acid anhydrides, Metals

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 47.0 mg/kg
Remarks: Behavioral:Food intake (animal). Lungs, Thorax, or Respiration:Dyspnea. Gastrointestinal:Other changes.

Inhalation: No data available

LD50 Dermal - Mammal - 790.0 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Severe skin irritation - 24 h
(Draize Test)

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: 2B - Group 2B: Possibly carcinogenic to humans (2,4-Dichlorophenol)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: SK8575000

spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Weakness, Lowered blood pressure, Tremors, Dizziness, Confusion., Convulsions, Cyanosis, Shock., Unconsciousness, Symptoms may be delayed., Molten or hot 2,4-Dichlorophenol is immediately absorbed through the skin in amounts which have caused death in humans. Rapid death in humans has been caused by skin exposure without immediate decontamination. Amounts of molten 2,4-Dichlorophenol that may cover as little as 1% body surface area (hand-size) may cause death.

Blood -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Lepomis macrochirus (Bluegill) - 1.6 - 2.6 mg/l - 96.0 h |
| | LC50 - Oncorhynchus mykiss (rainbow trout) - 2.2 - 3.1 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 2.70 - 3.90 mg/l - 24 h |
| Toxicity to algae | EC50 - Chlorella vulgaris (Fresh water algae) - 9.20 mg/l - 96 h |
| | Growth inhibition EC50 - Chlorella vulgaris (Fresh water algae) - 9.2 mg/l - 96 h |

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
Bioaccumulation Carassius auratus (goldfish) - 24 h
- 8 mg/l

Bioconcentration factor (BCF): 34

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

No data available

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2928 Class: 6.1 (8) Packing group: II
Proper shipping name: Toxic solids, corrosive, organic, n.o.s. (2,4-Dichlorophenol)
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 2928 Class: 6.1 (8) Packing group: II EMS-No: F-A, S-B
Proper shipping name: TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S. (2,4-Dichlorophenol)
Marine pollutant:yes

**IATA**
UN number: 2928 Class: 6.1 (8) Packing group: II
Proper shipping name: Toxic solid, corrosive, organic, n.o.s. (2,4-Dichlorophenol)

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| 2,4-Dichlorophenol | 120-83-2 | 2011-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,4-Dichlorophenol | 120-83-2 | 2011-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,4-Dichlorophenol | 120-83-2 | 2011-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,4-Dichlorophenol | 120-83-2 | 2011-07-01 |

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Eye Dam. | Serious eye damage |
| H300 | Fatal if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H401 | Toxic to aquatic life. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 4 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 3.7 Revision Date: 03/03/2015 Print Date: 05/28/2016

# SAFETY DATA SHEET

Version 4.5
Revision Date 01/18/2016
Print Date 02/09/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : 2,4-Dimethylphenol

Product Number : D174203
Brand : Aldrich
Index-No. : 604-006-00-X

CAS-No. : 105-67-9

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Dermal (Category 3), H311
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Acute aquatic toxicity (Category 2), H401

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H301 + H311 Toxic if swallowed or in contact with skin
H314 Causes severe skin burns and eye damage.
H401 Toxic to aquatic life.

Precautionary statement(s)
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face

| | |
|---|---|
| | protection. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. |
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER or doctor/ physician. |
| P322 | Specific measures (see supplemental first aid instructions on this label). |
| P361 | Remove/Take off immediately all contaminated clothing. |
| P363 | Wash contaminated clothing before reuse. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms : 4-Hydroxy-*m*-xylene
asym.-*m*-Xylenol

Formula : $C_8H_{10}O$
Molecular weight : 122.16 g/mol
CAS-No. : 105-67-9
EC-No. : 203-321-6
Index-No. : 604-006-00-X

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **2,4-Xylenol** | | |
| | Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Aquatic Acute 2; H301 + H311, H314, H401 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.Continue rinsing eyes during transport to hospital.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

**8.2 Exposure controls**

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 60 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: Semi-solid melting to a liquid, clear<br>Colour: brown |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 22 - 23 °C (72 - 73 °F) - lit. |
| f) | Initial boiling point and boiling range | 211 - 212 °C (412 - 414 °F) - lit. |
| g) | Flash point | 94.0 °C (201.2 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | 0.1 hPa (0.1 mmHg) at 25.0 °C (77.0 °F) |
| l) | Vapour density | No data available |

| | | |
|---|---|---|
| m) | Relative density | 1.011 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 2.35 |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Bases, Acid chlorides, Acid anhydrides, Oxidizing agents, Brass, Copper

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 3,200 mg/kg

Inhalation: No data available

LD50 Dermal - Rat - 1,040 mg/kg

No data available

**Skin corrosion/irritation**
Causes burns.

**Serious eye damage/eye irritation**
Risk of serious damage to eyes.

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: ZE5600000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Oncorhynchus mykiss (rainbow trout) - 9.2 mg/l - 96 h |
| Toxicity to daphnia and other aquatic invertebrates | LC50 - Daphnia magna (Water flea) - 2.1 mg/l - 48 h |

### 12.2 Persistence and degradability

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Lepomis macrochirus (Bluegill) - 28 d<br>- 0.0102 mg/l |
| | Bioconcentration factor (BCF): 150 |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2261 Class: 6.1 Packing group: II
Proper shipping name: Xylenols, solid
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 2261 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: XYLENOLS, SOLID

**IATA**
UN number: 2261 Class: 6.1 Packing group: II
Proper shipping name: Xylenols, solid

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| 2,4-Xylenol | 105-67-9 | 2007-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,4-Xylenol | 105-67-9 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,4-Xylenol | 105-67-9 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,4-Xylenol | 105-67-9 | 2007-07-01 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Eye Dam. | Serious eye damage |
| H301 | Toxic if swallowed. |
| H301 + H311 | Toxic if swallowed or in contact with skin |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |

**HMIS Rating**
Health hazard: 3
Chronic Health Hazard:
Flammability: 1

| | |
|---|---|
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Fire Hazard: | 1 |
| Reactivity Hazard: | 0 |

**Further information**

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**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.5 Revision Date: 01/18/2016 Print Date: 02/09/2016

# SAFETY DATA SHEET

Version 4.8
Revision Date 11/04/2015
Print Date 05/28/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : 2,4-Dinitrotoluene

Product Number : 101397
Brand : Aldrich
Index-No. : 609-007-00-9

CAS-No. : 121-14-2

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 3), H331
Acute toxicity, Dermal (Category 3), H311
Germ cell mutagenicity (Category 2), H341
Carcinogenicity (Category 1B), H350
Reproductive toxicity (Category 2), H361
Specific target organ toxicity - repeated exposure (Category 2), H373
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

| | |
|---|---|
| H301 + H311 + H331 | Toxic if swallowed, in contact with skin or if inhaled |
| H341 | Suspected of causing genetic defects. |
| H350 | May cause cancer. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

| | |
|---|---|
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. |
| P302 + P352 + P312 | IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P304 + P340 + P311 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $C_7H_6N_2O_4$ |
| Molecular weight | : | 182.13 g/mol |
| CAS-No. | : | 121-14-2 |
| EC-No. | : | 204-450-0 |
| Index-No. | : | 609-007-00-9 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **2,4-Dinitrotoluene** Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH) | | |
| | Acute Tox. 3; Muta. 2; Carc. 1B; Repr. 2; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H301 + H311 + H331, H341, H350, H361, H373, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Nitrogen oxides (NOx)

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid formation of dust and aerosols.Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| 2,4-Dinitrotoluene | 121-14-2 | TWA | 1.500000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | Remarks | Potential Occupational Carcinogen<br>Various isomers of DNT exist.<br>See Appendix A<br>Potential for dermal absorption | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: crystalline<br>Colour: light yellow |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |

| | | |
|---|---|---|
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 67 - 70 °C (153 - 158 °F) |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | 155.0 °C (311.0 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | 133.3 hPa (100.0 mmHg) at 157.7 °C (315.9 °F)<br>1.3 hPa (1.0 mmHg) at 102.7 °C (216.9 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Oxidizing agents, Reducing agents, Strong bases, Metals

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 268.0 mg/kg

Inhalation: No data available

LD50 Dermal - Guinea pig - > 1,000 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Mild skin irritation - 24 h

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (2,4-Dinitrotoluene) |
| ACGIH: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: XT1575000

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Heart -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC0 - Oryzias latipes - > 16 mg/l - 96.0 h |
| | LC50 - Pimephales promelas (fathead minnow) - 31 mg/l - 96.0 h |
| | NOEC - other fish - 1.8 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 26.20 mg/l - 48 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3454 Class: 6.1 Packing group: II
Proper shipping name: Dinitrotoluenes, solid
Reportable Quantity (RQ): 10 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 3454 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: DINITROTOLUENES, SOLID
Marine pollutant:yes

**IATA**
UN number: 3454 Class: 6.1 Packing group: II
Proper shipping name: Dinitrotoluenes, solid

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| 2,4-Dinitrotoluene | 121-14-2 | 2007-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,4-Dinitrotoluene | 121-14-2 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,4-Dinitrotoluene | 121-14-2 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,4-Dinitrotoluene | 121-14-2 | 2007-07-01 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| | 121-14-2 | 2007-09-28 |

2,4-Dinitrotoluene

| | | |
|---|---|---|
| WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.<br>2,4-Dinitrotoluene | CAS-No.<br>121-14-2 | Revision Date<br>2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H301 | Toxic if swallowed. |
| H301 + H311 + H331 | Toxic if swallowed, in contact with skin or if inhaled |
| H311 | Toxic in contact with skin. |
| H331 | Toxic if inhaled. |
| H341 | Suspected of causing genetic defects. |
| H350 | May cause cancer. |
| H361 | Suspected of damaging fertility or the unborn child. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |
| Health hazard: | 2 |
| Fire Hazard: | 1 |
| Reactivity Hazard: | 0 |

**Further information**

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Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.8 Revision Date: 11/04/2015 Print Date: 05/28/2016

# SAFETY DATA SHEET

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Revision Date 11/04/2015
Print Date 04/20/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : 2,6-Dinitrotoluene

Product Number : D200603
Brand : Aldrich
Index-No. : 609-049-00-8

CAS-No. : 606-20-2

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 2), H330
Acute toxicity, Dermal (Category 3), H311
Germ cell mutagenicity (Category 2), H341
Carcinogenicity (Category 1B), H350
Reproductive toxicity (Category 2), H361
Specific target organ toxicity - repeated exposure (Category 2), H373
Acute aquatic toxicity (Category 3), H402
Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

| | |
|---|---|
| H301 + H311 | Toxic if swallowed or in contact with skin |
| H330 | Fatal if inhaled. |
| H341 | Suspected of causing genetic defects. |
| H350 | May cause cancer. |
| H361 | Suspected of damaging fertility or the unborn child. |

| | |
|---|---|
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing. |
| P284 | Wear respiratory protection. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P310 | Immediately call a POISON CENTER or doctor/ physician. |
| P320 | Specific treatment is urgent (see supplemental first aid instructions on this label). |
| P330 | Rinse mouth. |
| P361 | Remove/Take off immediately all contaminated clothing. |
| P363 | Wash contaminated clothing before reuse. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $C_7H_6N_2O_4$ |
| Molecular weight | : | 182.13 g/mol |
| CAS-No. | : | 606-20-2 |
| EC-No. | : | 210-106-0 |
| Index-No. | : | 609-049-00-8 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **2,6-Dinitrotoluene** | | |
| | Acute Tox. 3; Acute Tox. 2; Acute Tox. 3; Muta. 2; Carc. 1B; Repr. 2; STOT RE 2; Aquatic Acute 3; Aquatic Chronic 3; H301 + H311, H330, H341, H350, H361, H373, H412 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Nitrogen oxides (NOx)

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid formation of dust and aerosols.Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| 2,6-Dinitrotoluene | 606-20-2 | TWA | 1.500000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | Remarks | Potential Occupational Carcinogen<br>Various isomers of DNT exist.<br>See Appendix A<br>Potential for dermal absorption | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: crystalline<br>Colour: light yellow |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |

| | | |
|---|---|---|
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 56 - 61 °C (133 - 142 °F) |
| f) | Initial boiling point and boiling range | 285.0 °C (545.0 °F) |
| g) | Flash point | 206.7 °C (404.1 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | 0.008 hPa (0.006 mmHg) at 25.0 °C (77.0 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 1.28 g/cm3 at 111.00 °C (231.80 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 2.10 |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Oxidizing agents, Reducing agents, Strong bases

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 177.0 mg/kg

LC50 Inhalation - Rat - 6 h - 240 mg/m3
Remarks: Behavioral:General anesthetic. Lungs, Thorax, or Respiration:Fibrosing alveolitis. Lungs, Thorax, or Respiration:Changes in Lung Weight.

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Mild skin irritation - 24 h

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
Laboratory experiments have shown mutagenic effects.
In vitro tests showed mutagenic effects

**Carcinogenicity**

Carcinogen This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Possible human carcinogen

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (2,6-Dinitrotoluene) |
| ACGIH: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
Suspected human reproductive toxicant

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

**Aspiration hazard**
No data available

**Additional Information**
RTECS: XT1925000

Spleen. -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Pimephales promelas (fathead minnow) - 17.2 - 50 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 21.70 mg/l - 48 h |
| Toxicity to algae | EC50 - Desmodesmus subspicatus (green algae) - 11.00 - 20.00 mg/l - 72 h |

### 12.2 Persistence and degradability
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3454 Class: 6.1 Packing group: II
Proper shipping name: Dinitrotoluenes, solid
Reportable Quantity (RQ): 100 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 3454 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: DINITROTOLUENES, SOLID
Marine pollutant:yes

**IATA**
UN number: 3454 Class: 6.1 Packing group: II
Proper shipping name: Dinitrotoluenes, solid

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| 2,6-Dinitrotoluene | 606-20-2 | 2007-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,6-Dinitrotoluene | 606-20-2 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,6-Dinitrotoluene | 606-20-2 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,6-Dinitrotoluene | 606-20-2 | 2007-07-01 |

**California Prop. 65 Components**

| | | |
|---|---|---|
| WARNING! This product contains a chemical known to the State of California to cause cancer.<br>2,6-Dinitrotoluene | CAS-No.<br>606-20-2 | Revision Date<br>2007-09-28 |
| WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.<br>2,6-Dinitrotoluene | CAS-No.<br>606-20-2 | Revision Date<br>2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H301 | Toxic if swallowed. |
| H301 + H311 | Toxic if swallowed or in contact with skin |
| H311 | Toxic in contact with skin. |
| H330 | Fatal if inhaled. |
| H341 | Suspected of causing genetic defects. |
| H350 | May cause cancer. |
| H361 | Suspected of damaging fertility or the unborn child. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Chronic Health Hazard: | * |
| Flammability: | 1 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Fire Hazard: | 1 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 3.9 Revision Date: 11/04/2015 Print Date: 04/20/2016

# SAFETY DATA SHEET

**Creation Date** 13-Apr-2009 **Revision Date** 24-Dec-2021 **Revision Number** 7

## 1. Identification

**Product Name** **2-Butanone**

**Cat No. :** **AC149670000; AC149670010; AC149670025; AC149670051; AC149670250; AC149670251**

**CAS No** 78-93-3
**Synonyms** Methyl ethyl ketone; MEK; Ethyl methyl ketone

**Recommended Use** Laboratory chemicals.
**Uses advised against** Food, drug, pesticide or biocidal product use.

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number** For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Flammable liquids | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Central nervous system (CNS). | |
| Specific target organ toxicity - (repeated exposure) | Category 2 |
| Target Organs - Kidney, Liver. | |

**Label Elements**

**Signal Word**
Danger

**Hazard Statements**

Highly flammable liquid and vapor
Causes serious eye irritation
May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure



**Precautionary Statements**
**Prevention**
Wash face, hands and any exposed skin thoroughly after handling
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Wear protective gloves/protective clothing/eye protection/face protection
Keep cool
**Response**
Get medical attention/advice if you feel unwell
**Inhalation**
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
**Skin**
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
**Eyes**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
**Fire**
In case of fire: Use CO2, dry chemical, or foam for extinction
**Storage**
Store in a well-ventilated place. Keep container tightly closed
Store locked up
**Disposal**
Dispose of contents/container to an approved waste disposal plant
**Hazards not otherwise classified (HNOC)**
Repeated exposure may cause skin dryness or cracking
**Other hazards**
Contains a known or suspected endocrine disruptor.

## 3. Composition/Information on Ingredients

| Component | CAS No | Weight % |
|---|---|---|
| Methyl ethyl ketone | 78-93-3 | >95 |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

| | |
|---|---|
| | medical attention. |
| **Skin Contact** | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur. |
| **Inhalation** | Remove to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial respiration. |
| **Ingestion** | Do NOT induce vomiting. Get medical attention. |
| **Most important symptoms and effects** | Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting |
| **Notes to Physician** | Treat symptomatically |

## 5. Fire-fighting measures

| | |
|---|---|
| **Suitable Extinguishing Media** | $CO_2$, dry chemical, dry sand, alcohol-resistant foam. Water mist may be used to cool closed containers. |
| **Unsuitable Extinguishing Media** | Water may be ineffective |
| **Flash Point** | -7 °C / 19.4 °F |
| **Method -** | CC (closed cup) |
| **Autoignition Temperature** | 404 °C / 759.2 °F |
| **Explosion Limits** | |
| **Upper** | 11.4 vol % |
| **Lower** | 1.4 vol % |
| **Oxidizing Properties** | Not oxidising |
| **Sensitivity to Mechanical Impact** | No information available |
| **Sensitivity to Static Discharge** | No information available |

**Specific Hazards Arising from the Chemical**
Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**
Carbon monoxide (CO). Carbon dioxide ($CO_2$).
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 2 | 3 | 1 | N/A |

## 6. Accidental release measures

| | |
|---|---|
| **Personal Precautions** | Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. |
| **Environmental Precautions** | Avoid release to the environment. See Section 12 for additional Ecological Information. |
| **Methods for Containment and Clean Up** | Remove all sources of ignition. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Use spark-proof tools and explosion-proof equipment. |

## 7. Handling and storage

**Handling**

Wear personal protective equipment/face protection. Ensure adequate ventilation. Use spark-proof tools and explosion-proof equipment. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

**Storage.**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Flammables area. Incompatible Materials. Strong oxidizing agents. Strong acids. Strong bases. Strong reducing agents. Ammonia. copper. Amines.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH | Mexico OEL (TWA) |
|---|---|---|---|---|
| Methyl ethyl ketone | TWA: 200 ppm<br>STEL: 300 ppm | (Vacated) TWA: 200 ppm<br>(Vacated) TWA: 590 mg/m³<br>(Vacated) STEL: 300 ppm<br>(Vacated) STEL: 885 mg/m³<br>TWA: 200 ppm<br>TWA: 590 mg/m³ | IDLH: 3000 ppm<br>TWA: 200 ppm<br>TWA: 590 mg/m³<br>STEL: 300 ppm<br>STEL: 885 mg/m³ | TWA: 200 ppm<br>STEL: 300 ppm |

*Legend*

*ACGIH - American Conference of Governmental Industrial Hygienists*
*OSHA - Occupational Safety and Health Administration*
*NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health*

**Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Liquid |
| **Appearance** | Colorless |
| **Odor** | Characteristic - sweet |
| **Odor Threshold** | No information available |
| **pH** | No information available |
| **Melting Point/Range** | -87 °C / -124.6 °F |
| **Boiling Point/Range** | 80 °C / 176 °F |
| **Flash Point** | -7 °C / 19.4 °F |
| **Method -** | CC (closed cup) |

| | |
|---|---|
| **Evaporation Rate** | 3.7 |
| **Flammability (solid,gas)** | Not applicable |
| **Flammability or explosive limits** | |
| **Upper** | 11.4 vol % |
| **Lower** | 1.4 vol % |
| **Vapor Pressure** | 105 mbar @ 20 °C |
| **Vapor Density** | 2.41 |
| **Specific Gravity** | 0.806 |
| **Solubility** | Soluble in water |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | 404 °C / 759.2 °F |
| **Decomposition Temperature** | No information available |
| **Viscosity** | 0.42 mPa.s @ 15°C |
| **Molecular Formula** | C4 H8 O |
| **Molecular Weight** | 72.11 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Hygroscopic.

**Conditions to Avoid** Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition. Exposure to moist air or water.

**Incompatible Materials** Strong oxidizing agents, Strong acids, Strong bases, Strong reducing agents, Ammonia, copper, Amines

**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide ($CO_2$)

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information**

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Methyl ethyl ketone | LD50 = 2483 mg/kg ( Rat ) | LD50 = 5000 mg/kg ( Rabbit ) | LC50 = 11700 ppm ( Rat ) 4 h |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** Irritating to eyes

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Methyl ethyl ketone | 78-93-3 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** Not mutagenic in AMES Test

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Central nervous system (CNS)
**STOT - repeated exposure** Kidney Liver

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity**

.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|
| Methyl ethyl ketone | Not listed | Lepomis macrochirus: LC50=3,22 g/L 96 h | EC50 = 3403 mg/L 30 min<br>EC50 = 3426 mg/L 5 min | EC50: = 5091 mg/L, 48h (Daphnia magna)<br>EC50: 4025 - 6440 mg/L, 48h Static (Daphnia magna)<br>EC50: > 520 mg/L, 48h (Daphnia magna) |

**Persistence and Degradability** Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its volatility.

| Component | log Pow |
|---|---|
| Methyl ethyl ketone | 0.29 |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| Component | RCRA - U Series Wastes | RCRA - P Series Wastes |
|---|---|---|
| Methyl ethyl ketone - 78-93-3 | U159 | - |

## 14. Transport information

**DOT**

**UN-No** UN1193
**Proper Shipping Name** Ethyl methyl ketone
**Hazard Class** 3
**Packing Group** II

**TDG**

**UN-No** UN1193
**Proper Shipping Name** ETHYL METHYL KETONE
**Hazard Class** 3
**Packing Group** II

**IATA**

**UN-No** UN1193
**Proper Shipping Name** Methyl ethyl ketone
**Hazard Class** 3

**Packing Group** II

**IMDG/IMO**

**UN-No** UN1193
**Proper Shipping Name** Ethyl methyl ketone (Methyl ethyl ketone)
**Hazard Class** 3
**Packing Group** II

## 15. Regulatory information

**United States of America Inventory**

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|---|---|---|---|---|
| Methyl ethyl ketone | 78-93-3 | X | ACTIVE | - |

**Legend:**
**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

**International Inventories**
Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|
| Methyl ethyl ketone | 78-93-3 | X | - | 201-159-0 | X | X | X | X | X | KE-24094 |

**KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

**U.S. Federal Regulations**

**SARA 313** Not applicable

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA** - Occupational Safety and Health Administration Not applicable

**CERCLA** This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Methyl ethyl ketone | 5000 lb | - |

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Methyl ethyl ketone | X | X | X | X | X |

**U.S. Department of Transportation**

| | |
|---|---|
| Reportable Quantity (RQ): | Y |
| DOT Marine Pollutant | N |
| DOT Severe Marine Pollutant | N |

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** Serious risk, Grade 3

**Authorisation/Restrictions according to EU REACH**

| Component | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---|---|---|---|
| Methyl ethyl ketone | - | Use restricted. See item 75. (see link for restriction details) | - |

*https://echa.europa.eu/substances-restricted-under-reach*

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|---|---|---|---|---|---|
| Methyl ethyl ketone | 78-93-3 | Listed | Not applicable | Not applicable | Not applicable |

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|---|---|---|---|---|---|
| Methyl ethyl ketone | 78-93-3 | Not applicable | Not applicable | Not applicable | Annex I - Y42 |

## 16. Other information

**Prepared By**
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Creation Date** 13-Apr-2009
**Revision Date** 24-Dec-2021
**Print Date** 24-Dec-2021
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**
**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text**

**End of SDS**

Fisher Scientific

Part of Thermo Fisher Scientific

# SAFETY DATA SHEET

**Revision Date** 10-Feb-2015 **Revision Number** 1

## 1. Identification

**Product Name** **2-Methylnaphthalene, 99% (gc)**

**Cat No. :** **AC414551000; AC414555000**

**Synonyms** No information available

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Entity / Business Name**
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number**
For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Acute oral toxicity | Category 4 |
| Skin Corrosion/irritation | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Respiratory system. | |

**Label Elements**

**Signal Word**
Warning

**Hazard Statements**
Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation



**Precautionary Statements**
**Prevention**
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
**Inhalation**
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
**Skin**
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
**Eyes**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
**Ingestion**
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
**Storage**
Store in a well-ventilated place. Keep container tightly closed
Store locked up
**Disposal**
Dispose of contents/container to an approved waste disposal plant
**Hazards not otherwise classified (HNOC)**
Toxic to aquatic life with long lasting effects

## 3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| 2-Methylnaphthalene | 91-57-6 | 99.0 |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes.

**Inhalation** Move to fresh air.

**Ingestion** Do not induce vomiting.

**Most important symptoms/effects** No information available.
**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Unsuitable Extinguishing Media** No information available

**Flash Point**
**Method -** No information available

**Autoignition Temperature** No information available
**Explosion Limits**
**Upper** No data available
**Lower** No data available
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**
None known
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 2 | 1 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment.
**Environmental Precautions** See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean Up** No information available.

## 7. Handling and storage

**Handling** Ensure adequate ventilation.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| 2-Methylnaphthalene | TWA: 0.5 ppm<br>Skin | | |

| Component | Quebec | Mexico OEL (TWA) | Ontario TWAEV |
|---|---|---|---|
| 2-Methylnaphthalene | | | TWA: 0.5 ppm<br>Skin |

*Legend*

*ACGIH - American Conference of Governmental Industrial Hygienists*

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Solid |
| **Appearance** | No information available |
| **Odor** | Odorless |
| **Odor Threshold** | No information available |
| **pH** | |
| **Melting Point/Range** | 37 38 °C |
| **Boiling Point/Range** | °C |
| **Flash Point** | |
| **Evaporation Rate** | No information available |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | < 1 mmHg @ 25 °C |
| **Vapor Density** | No information available |
| **Relative Density** | 1.0000 |
| **Solubility** | Insoluble in water |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | No information available |
| **Decomposition Temperature** | No information available |
| **Viscosity** | No information available |
| **Molecular Formula** | C11H10 |
| **Molecular Weight** | 142.20 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products.

**Incompatible Materials** Strong oxidizing agents

**Hazardous Decomposition Products** None under normal use conditions

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| 2-Methylnaphthalene | 1630 mg/kg ( Rat ) | Not listed | Not listed |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | 91-57-6 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Respiratory system
**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity**
Do not empty into drains.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|
| 2-Methylnaphthalene | Not listed | Pimephales promelas:LC50 = 2.5mg/L | Not listed | EC50 = 1.5 mg/L/48h |

**Persistence and Degradability** No information available
**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

| Component | log Pow |
|---|---|
| 2-Methylnaphthalene | 3.86 |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT** Not regulated
**TDG** Not regulated
**IATA** Not regulated
**IMDG/IMO** Not regulated

## 15. Regulatory information

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-Methylnaphthalene | X | X | - | 202-078-3 | - | | X | X | X | X | - |

**Legend:**

**X - Listed**
**E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.**
**F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.**
**N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.**
**P - Indicates a commenced PMN substance**
**R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.**
**S - Indicates a substance that is identified in a proposed or final Significant New Use Rule**
**T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.**
**XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).**
**Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.**
**Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.**

## U.S. Federal Regulations

**TSCA 12(b)** Not applicable

**SARA 313** Not applicable

**SARA 311/312 Hazardous Categorization**

| | |
|---|---|
| **Acute Health Hazard** | Yes |
| **Chronic Health Hazard** | No |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**Clean Water Act** Not applicable

**Clean Air Act** Not applicable

**OSHA** Occupational Safety and Health Administration
Not applicable

**CERCLA**
Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| 2-Methylnaphthalene | - | X | - | - | - |

**U.S. Department of Transportation**

| | |
|---|---|
| Reportable Quantity (RQ): | N |
| DOT Marine Pollutant | N |
| DOT Severe Marine Pollutant | N |

**U.S. Department of Homeland Security**
This product does not contain any DHS chemicals.

## Other International Regulations

**Mexico - Grade** No information available

**Canada**
**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

**WHMIS Hazard Class** D1B Toxic materials

D2B Toxic materials



## 16. Other information

**Prepared By**
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Revision Date** 10-Feb-2015
**Print Date** 10-Feb-2015
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Disclaimer**

**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of SDS**

# SAFETY DATA SHEET

Version 5.1
Revision Date 06/26/2014
Print Date 05/11/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : 4,4′-DDD

Product Number : 35486
Brand : Sigma-Aldrich

CAS-No. : 72-54-8

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Dermal (Category 4), H312
Carcinogenicity (Category 2), H351
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H301 Toxic if swallowed.
H312 Harmful in contact with skin.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

| | |
|---|---|
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P322 | Specific measures (see supplemental first aid instructions on this label). |
| P330 | Rinse mouth. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Synonyms | : | 1,1-Dichloro-2,2-bis(4-chlorophenyl)ethane<br>TDE |
| Formula | : | $C_{14}H_{10}Cl_4$ |
| Molecular Weight | : | 320.04 g/mol |
| CAS-No. | : | 72-54-8 |
| EC-No. | : | 200-783-0 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane** | | |
| | Acute Tox. 3; Acute Tox. 4; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H301, H312, H351, H410 | - |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
no data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas
Nature of decomposition products not known.

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

no data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odour | no data available |
| c) | Odour Threshold | no data available |
| d) | pH | no data available |
| e) | Melting point/freezing point | 94.0 - 96.0 °C (201.2 - 204.8 °F) |
| f) | Initial boiling point and boiling range | 193.0 °C (379.4 °F) at 1.3 hPa (1.0 mmHg) |
| g) | Flash point | no data available |
| h) | Evapouration rate | no data available |
| i) | Flammability (solid, gas) | no data available |
| j) | Upper/lower flammability or explosive limits | no data available |
| k) | Vapour pressure | < 0.00001 hPa (< 0.00001 mmHg) at 25.0 °C (77.0 °F) |
| l) | Vapour density | no data available |
| m) | Relative density | 1.38 g/cm3 |
| n) | Water solubility | no data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 6.02 |
| p) | Auto-ignition temperature | no data available |
| q) | Decomposition temperature | no data available |
| r) | Viscosity | no data available |
| s) | Explosive properties | no data available |
| t) | Oxidizing properties | no data available |

### 9.2 Other safety information
no data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
no data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
no data available

**10.4 Conditions to avoid**
no data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - no data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Hamster - > 5,000 mg/kg

TDLo Oral - Human - 428.5 mg/kg
Remarks: Endocrine:Adrenal cortex hypoplasia.

TDLo Oral - rat - 6,000 mg/kg
Remarks: Cardiac:Other changes. Gastrointestinal:Other changes. Kidney, Ureter, Bladder:Changes in both tubules and glomeruli.

TDLo Oral - rat - 14 mg/kg
Remarks: Liver:Changes in liver weight. Endocrine:Estrogenic. Musculoskeletal:Other changes.

TDLo Oral - rat - 2,100 mg/kg
Remarks: Behavioral:Altered sleep time (including change in righting reflex).

Inhalation: no data available

LD50 Dermal - rabbit - 1,200 mg/kg
Remarks: Behavioral:Excitement. Behavioral:Convulsions or effect on seizure threshold. Skin irritation

no data available

**Skin corrosion/irritation**
no data available

**Serious eye damage/eye irritation**
no data available

**Respiratory or skin sensitisation**
no data available

**Germ cell mutagenicity**
no data available

**Carcinogenicity**

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
no data available

no data available

**Specific target organ toxicity - single exposure**
no data available

**Specific target organ toxicity - repeated exposure**
no data available

**Aspiration hazard**
no data available

**Additional Information**
RTECS: KI0700000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - other fish - 1.18 - 9 mg/l - 96.0 h |
| | LC50 - Lepomis macrochirus (Bluegill) - 0.04 - 0.05 mg/l - 96.0 h |
| | LC50 - Oncorhynchus mykiss (rainbow trout) - 0.06 - 0.09 mg/l - 96.0 h |
| | LC50 - Pimephales promelas (fathead minnow) - 3.47 - 5.58 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia pulex (Water flea) - 0.01 mg/l - 48 h |

### 12.2 Persistence and degradability
no data available

### 12.3 Bioaccumulative potential
Indication of bioaccumulation.

### 12.4 Mobility in soil
no data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solids, organic, n.o.s. (2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane)
Reportable Quantity (RQ): 1 lbs
Marine pollutant: No
Poison Inhalation Hazard: No

**IMDG**
UN number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane)
Marine pollutant: No

**IATA**
UN number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solid, organic, n.o.s. (2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane)

## 15. REGULATORY INFORMATION

**SARA 302 Components**
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Acute Health Hazard

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane | 72-54-8 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane | 72-54-8 | 1993-04-24 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| 2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane | 72-54-8 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H301 | Toxic if swallowed. |
| H312 | Harmful in contact with skin. |
| H351 | Suspected of causing cancer. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.1 Revision Date: 06/26/2014 Print Date: 05/11/2016

# SAFETY DATA SHEET

Version 5.4
Revision Date 01/02/2015
Print Date 12/11/2015

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Acenaphthene

Product Number : 215376
Brand : Aldrich

CAS-No. : 83-32-9

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Carcinogenicity (Category 1B), H350
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H350 May cause cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

| | |
|---|---|
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear eye protection/ face protection. |
| P280 | Wear protective gloves. |
| P281 | Use personal protective equipment as required. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 + P312 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Synonyms : 1,8-Ethylenenaphthalene

Formula : $C_{12}H_{10}$

Molecular weight : 154.21 g/mol

CAS-No. : 83-32-9

EC-No. : 201-469-6

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Acenaphthene** | | |
| | Skin Irrit. 2; Eye Irrit. 2A; Carc. 1B; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H315, H319, H335, H350, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non Combustible Solids

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

**8.2 Exposure controls**

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 90 - 94 °C (194 - 201 °F) - lit. |
| f) | Initial boiling point and boiling range | 279 °C (534 °F) - lit. |
| g) | Flash point | 125.0 °C (257.0 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |

| | | |
|---|---|---|
| k) | Vapour pressure | 13.3 hPa (10.0 mmHg) at 131.0 °C (267.8 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 3.39 - 4.19 |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
No data available

Inhalation: No data available

Dermal: No data available

LD50 Intraperitoneal - Rat - 600 mg/kg

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Acenaphthene)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: Reasonably anticipated to be a human carcinogen (Acenaphthene)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: AB1000000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Oncorhynchus mykiss (rainbow trout) - 0.67 mg/l - 96.0 h |
| | LC50 - Pimephales promelas (fathead minnow) - 0.6 - 1.73 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 1.27 - 3.45 mg/l - 48 h |
| Toxicity to algae | EC50 - Pseudokirchneriella subcapitata (green algae) - 0.52 - 0.53 mg/l - 96 h |

### 12.2 Persistence and degradability

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Lepomis macrochirus (Bluegill) - 28 d<br>- 0.00894 mg/l |
| | Bioconcentration factor (BCF): 387 |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Acenaphthene)
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Acenaphthene)
Marine pollutant:yes

**IATA**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Acenaphthene)

**Further information**
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Acenaphthene | 83-32-9 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Acenaphthene | 83-32-9 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Acenaphthene | 83-32-9 | 1993-04-24 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| Acenaphthene | 83-32-9 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| Eye Irrit. | Eye irritation |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

| | |
|---|---|
| H350 | May cause cancer. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Chronic Health Hazard: | * |
| Flammability: | 1 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Fire Hazard: | 1 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.4 Revision Date: 01/02/2015 Print Date: 12/11/2015

# SAFETY DATA SHEET

**Revision Date** 10-Feb-2015 **Revision Number** 1

## 1. Identification

**Product Name** **Poly(acenaphthylene)**

**Cat No. :** **AC178020000; AC178020050; AC178020100**

**Synonyms** None.

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Entity / Business Name**
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number**
For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**
Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Based on available data, the classification criteria are not met

**Label Elements**
None required

**Hazards not otherwise classified (HNOC)**
None identified

**Unknown Acute Toxicity**
.? % of the mixture consists of ingredients of unknown toxicity.

## 3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Poly(acenaphthylene) | 25036-01-5 | 100 |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

**Inhalation** Remove from exposure, lie down. Move to fresh air.

**Ingestion** Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. If possible drink milk afterwards.

**Most important symptoms/effects** No information available.
**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Water spray. Carbon dioxide ($CO_2$). Dry chemical. alcohol-resistant foam.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available
**Method -** No information available

**Autoignition Temperature** No information available
**Explosion Limits**
**Upper** No data available
**Lower** No data available
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**
Thermal decomposition can lead to release of irritating gases and vapors Carbon monoxide (CO) Carbon dioxide ($CO_2$)
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 0 | 0 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment.
**Environmental Precautions** See Section 12 for additional ecological information.

**Methods for Containment and Clean Up** Sweep up or vacuum up spillage and collect in suitable container for disposal.

## 7. Handling and storage

**Handling** Avoid contact with skin and eyes. Avoid contact with clothing. Remove and wash contaminated clothing before re-use. Avoid breathing vapors or mists. Do not ingest. Wash thoroughly after handling.

**Storage** Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

## 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ventilation systems.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Powder Solid |
| **Appearance** | Yellow |
| **Odor** | Odorless |
| **Odor Threshold** | No information available |
| **pH** | No information available |
| **Melting Point/Range** | No data available |
| **Boiling Point/Range** | No information available |
| **Flash Point** | No information available |
| **Evaporation Rate** | No information available |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | No information available |
| **Vapor Density** | No information available |
| **Relative Density** | No information available |
| **Solubility** | No information available |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | No information available |
| **Decomposition Temperature** | No information available |
| **Viscosity** | No information available |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products.

**Incompatible Materials** Oxidizing agents

**Hazardous Decomposition Products** Thermal decomposition can lead to release of irritating gases and vapors, Carbon monoxide (CO), Carbon dioxide ($CO_2$)

**Hazardous Polymerization** No information available.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information** No acute toxicity information is available for this product

**Oral LD50** Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
**Dermal LD50** Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.
**Mist LC50** Based on ATE data, the classification criteria are not met. ATE > 5 mg/l.
**Component Information**
**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Poly(acenaphthylene) | 25036-01-5 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known
**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** No information available
**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity**
Do not empty into drains.

**Persistence and Degradability** No information available
**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT** Not regulated
**TDG** Not regulated
**IATA** Not regulated
**IMDG/IMO** Not regulated

## 15. Regulatory information

**International Inventories**

**Legend:**
**X - Listed**
**E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.**
**F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.**
**N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.**
**P - Indicates a commenced PMN substance**
**R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.**
**S - Indicates a substance that is identified in a proposed or final Significant New Use Rule**
**T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.**
**XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).**
**Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.**
**Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.**

**U.S. Federal Regulations**

**TSCA 12(b)** Not applicable

**SARA 313** Not applicable

**SARA 311/312 Hazardous Categorization**

| | |
|---|---|
| **Acute Health Hazard** | No |
| **Chronic Health Hazard** | No |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**Clean Water Act** Not applicable

**Clean Air Act** Not applicable

**OSHA** Occupational Safety and Health Administration
Not applicable

**CERCLA**
Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**State Right-to-Know** Not applicable

**U.S. Department of Transportation**

| | |
|---|---|
| Reportable Quantity (RQ): | N |
| DOT Marine Pollutant | N |
| DOT Severe Marine Pollutant | N |

**U.S. Department of Homeland Security**
This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Canada**
**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

**WHMIS Hazard Class** Non-controlled

## 16. Other information

**Prepared By**
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Revision Date** 10-Feb-2015
**Print Date** 10-Feb-2015
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Disclaimer**

**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of SDS**

# SAFETY DATA SHEET

Version 6.11
Revision Date 09/06/2024
Print Date 09/07/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Acetone

Product Number : 179124
Brand : SIGALD
Index-No. : 606-001-00-8
CAS-No. : 67-64-1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable liquids (Category 2), H225
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336



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For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word: Danger

Hazard Statements

| | |
|---|---|
| H225 | Highly flammable liquid and vapor. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |

Precautionary Statements

| | |
|---|---|
| P210 | Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing mist or vapors. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Repeated exposure may cause skin dryness or cracking.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | $C_3H_6O$ |
| Molecular weight | : | 58.08 g/mol |
| CAS-No. | : | 67-64-1 |
| EC-No. | : | 200-662-2 |
| Index-No. | : | 606-001-00-8 |



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| Component | Classification | Concentration |
|---|---|---|
| **acetone** | | |
| | Flam. Liq. 2; Eye Irrit. 2A; STOT SE 3; H225, H319, H336<br>Concentration limits:<br>>= 20 %: STOT SE 3, H336; | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Call in physician.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

**If swallowed**
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Carbon dioxide (CO2) Foam Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.



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### 5.2 Special hazards arising from the substance or mixture

Carbon oxides
Combustible.
Pay attention to flashback.
Vapors are heavier than air and may spread along floors.
Development of hazardous combustion gases or vapours possible in the event of fire.
Forms explosive mixtures with air at ambient temperatures.

### 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

### 5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.
Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb® ).
Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

**Advice on protection against fire and explosion**
Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.

**Hygiene measures**
Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**



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Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

**Storage class**
Storage class (TRGS 510): 3: Flammable liquids

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| acetone | 67-64-1 | TWA | 250 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Not classifiable as a human carcinogen | | |
| | | STEL | 500 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Not classifiable as a human carcinogen | | |
| | | TWA | 250 ppm<br>590 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 1,000 ppm<br>2,400 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | C | 3,000 ppm | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
| | | PEL | 500 ppm<br>1,200 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
| | | STEL | 750 ppm<br>1,780 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| acetone | 67-64-1 | Acetone | 25 mg/l | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | End of shift (As soon as possible after exposure ceases) | | | |



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**Derived No Effect Level (DNEL)**

| Application Area | Routes of exposure | Health effect | Value |
|---|---|---|---|
| Workers | Skin contact | Long-term systemic effects | 186mg/kg BW/d |
| Consumers | Ingestion | Long-term systemic effects | 62mg/kg BW/d |
| Consumers | Skin contact | Long-term systemic effects | 62mg/kg BW/d |
| Workers | Inhalation | Acute systemic effects | 2420 mg/m3 |
| Workers | Inhalation | Long-term systemic effects | 1210 mg/m3 |
| Consumers | Inhalation | Long-term systemic effects | 200 mg/m3 |

**Predicted No Effect Concentration (PNEC)**

| Compartment | Value |
|---|---|
| Soil | 33.3 mg/kg |
| Sea water | 1.06 mg/l |
| Fresh water | 10.6 mg/l |
| Sea sediment | 3.04 mg/kg |
| Fresh water sediment | 30.4 mg/kg |
| Onsite sewage treatment plant | 100 mg/l |

## 8.2 Exposure controls

**Appropriate engineering controls**
Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: butyl-rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Butoject® (KCL 898)

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: Latex gloves
Minimum layer thickness: 0.6 mm
Break through time: 10 min
Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M)



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**Body Protection**
Flame retardant antistatic protective clothing.

**Respiratory protection**
Recommended Filter type: Filter type AX
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when vapours/aerosols are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains. Risk of explosion.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: clear, liquid<br>Color: colorless |
| b) | Odor | pungent, weakly aromatic |
| c) | Odor Threshold | 0.1 ppm |
| d) | pH | 5 - 6 at 395 g/l at 20 °C (68 °F) |
| e) | Melting point/freezing point | Melting point/ range: -94 °C (-137 °F) - lit. |
| f) | Initial boiling point and boiling range | 56 °C 133 °F at 1,013 hPa - lit. |
| g) | Flash point | -17.0 °C (1.4 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 13 %(V)<br>Lower explosion limit: 2 %(V) |
| k) | Vapor pressure | 245.3 hPa at 20.0 °C (68.0 °F) |
| l) | Vapor density | No data available |
| m) | Density | 0.791 g/cm3 at 25 °C (77 °F) - lit. |
| | Relative density | No data available |
| n) | Water solubility | soluble, in all proportions |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Autoignition | 465.0 °C (869.0 °F) |



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| | | |
|---|---|---|
| | temperature | |
| q) | Decomposition temperature | Distillable in an undecomposed state at normal pressure. |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | none |

**9.2 Other safety information**

| | |
|---|---|
| Conductivity | 0.01 µS/cm at 20 °C (68 °F) |
| Surface tension | 23.2 mN/m at 20.0 °C (68.0 °F) |

## SECTION 10: Stability and reactivity

**10.1 Reactivity**

Vapors may form explosive mixture with air.

**10.2 Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

**10.3 Possibility of hazardous reactions**

Risk of ignition or formation of inflammable gases or vapours with:
chromosulfuric acid
chromyl chloride
ethanolamine
Fluorine
Strong oxidizing agents
strong reducing agents
Nitric acid
chromium(VI) oxide
Risk of explosion with:
nonmetallic oxyhalides
halogen-halogen compounds
Chloroform
nitrating acid
nitrosyl compounds
hydrogen peroxide
halogen oxides
organic nitro compounds
peroxi compounds
Exothermic reaction with:
Bromine
Alkali metals
alkali hydroxides
Halogenated hydrocarbon
Sulfur dichloride
phosphorous oxichloride



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### 10.4 Conditions to avoid
Warming.

### 10.5 Incompatible materials
No data available

### 10.6 Hazardous decomposition products
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - female - 5,800 mg/kg
Remarks: (ECHA)
Symptoms: Stomach/intestinal disorders, Risk of aspiration upon vomiting., Pulmonary failure possible after aspiration of vomit.
LC50 Inhalation - Rat - 4 h - 76 mg/l - vapor

Remarks: Unconsciousness
Drowsiness
Dizziness
(External MSDS)
LD50 Dermal - Rabbit - 20,000 mg/kg
Remarks: (IUCLID)

**Skin corrosion/irritation**
Skin - Rabbit
Result: Mild skin irritation - 24 h
(Draize Test)
Remarks: (RTECS)

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Eye irritation - 24 h
(Draize Test)
Remarks: (RTECS)

**Respiratory or skin sensitization**
Maximization Test - Guinea pig
Result: negative
Remarks: (ECHA)
Chronic exposure may cause dermatitis.

**Germ cell mutagenicity**
Test Type: Mutagenicity (mammal cell test): chromosome aberration.
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation



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Method: OECD Test Guideline 471
Result: negative
Test Type: In vitro mammalian cell gene mutation test
Test system: Mouse lymphoma test
Metabolic activation: without metabolic activation
Method: OECD Test Guideline 476
Result: negative

**Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
Inhalation - May cause drowsiness or dizziness. - Narcotic effects
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

## 11.2 Additional Information

RTECS: AL3150000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After absorption:

Headache
Salivation
Nausea
Vomiting
Dizziness
narcosis
Coma

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Kidney - Irregularities - Based on Human Evidence

Skin - Dermatitis - Based on Human Evidence

Kidney - Irregularities - Based on Human Evidence



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Skin - Dermatitis - Based on Human Evidence

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | flow-through test LC50 - Pimephales promelas (fathead minnow) - 6,210 mg/l - 96 h<br>(OECD Test Guideline 203) |
| Toxicity to daphnia and other aquatic invertebrates | static test LC50 - Daphnia pulex (Water flea) - 8,800 mg/l - 48 h<br>Remarks: (ECHA) |
| Toxicity to algae | static test NOEC - M.aeruginosa - 530 mg/l - 8 d<br>(DIN 38412)<br>Remarks: (maximum permissible toxic concentration)<br>(IUCLID) |
| Toxicity to bacteria | static test EC50 - activated sludge - 61.15 mg/l - 30 min<br>(OECD Test Guideline 209) |
| Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) | flow-through test NOEC - Daphnia magna (Water flea) - 2,212 mg/l - 28 d<br>Remarks: (ECHA) |

### 12.2 Persistence and degradability

| | |
|---|---|
| Biodegradability | aerobic - Exposure time 28 d<br>Result: 91 % - Readily biodegradable.<br>(OECD Test Guideline 301B) |
| Biochemical Oxygen Demand (BOD) | 1,850 mg/g<br>Remarks: (IUCLID) |
| Chemical Oxygen Demand (COD) | 2,070 mg/g<br>Remarks: (IUCLID) |
| Theoretical oxygen demand | 2,200 mg/g<br>Remarks: (Lit.) |

### 12.3 Bioaccumulative potential

Does not bioaccumulate.

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties

No data available



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### 12.7 Other adverse effects

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**
UN number: 1090 Class: 3 Packing group: II
Proper shipping name: Acetone
Reportable Quantity (RQ): 5000 lbs
Poison Inhalation Hazard: No

**IMDG**
UN number: 1090 Class: 3 Packing group: II EMS-No: F-E, S-D
Proper shipping name: ACETONE

**IATA**
UN number: 1090 Class: 3 Packing group: II
Proper shipping name: Acetone

## SECTION 15: Regulatory information

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| acetone | 67-64-1 | 5000 | 5000 |

**SARA 304 Extremely Hazardous Substances Reportable Quantity**
This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**
This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Fire Hazard
Acute Health Hazard
Chronic Health Hazard



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operates as MilliporeSigma in the US and Canada

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations**

**Massachusetts Right To Know**

| | |
|---|---|
| acetone | 67-64-1 |

**Pennsylvania Right To Know**

| | |
|---|---|
| acetone | 67-64-1 |

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

**Washington Chemicals of High Concern**

Product does not contain any listed chemicals

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16: Other information

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 6.11 Revision Date: 09/06/2024 Print Date: 09/07/2024



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operates as MilliporeSigma in the US and Canada

# Safety Data Sheet

**Revision Date: 10/21/14**
www.restek.com

## 1. IDENTIFICATION

| | |
|---|---|
| **Catalog Number / Product Name:** | **32205, 32205-5XX, & 32305 / Aldrin Standard** |
| **Company:** | Restek Corporation |
| **Address:** | 110 Benner Circle<br>Bellefonte, Pa. 16823 |
| **Phone#:** | 814-353-1300 |
| **Fax#:** | 814-353-1309 |
| **Emergency#:** | 800-424-9300 (CHEMTREC)<br>703-527-3887 (Outside the US) |
| **Email:** | sds@restek.com |
| **Revision Number:** | 5 |
| **Intended use:** | For Laboratory use only |

## 2. HAZARD(S)IDENTIFICATION

**Emergency Overview:**

**GHS Hazard Symbols:**



**GHS Classification:**

Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 1
Flammable Liquid Category 2
Acute Toxicity - Inhalation Dust / Mist Category 3
Acute Toxicity - Inhalation Vapour Category 3
Acute Toxicity - Inhalation Gas Category 3
Acute Toxicity - Dermal Category 3
Acute Toxicity - Oral Category 3

**GHS Signal Word:**

Danger

**GHS Hazard:**

Highly flammable liquid and vapour.
Toxic if swallowed, in contact with skin or if inhaled.
Toxic if inhaled.
Causes damage to organs.

**GHS Precautions:**

**Safety Precautions:**

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilation and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wash hands and skin thoroughly after handling.
Do no eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

**First Aid Measures:**

IF SWALLOWED: Immediately call a POISON CENTER/doctor/....
IF ON SKIN: Wash with plenty of soap and water.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF exposed: Call a POISON CENTER or doctor/physician.
Call a POISON CENTER or doctor/physician if you feel unwell.
Specific treatment see section 4.

| | |
|---|---|
| | Specific measures see section 4.<br>Rinse mouth.<br>Remove/Take off immediately all contaminated clothing.<br>Wash contaminated clothing before reuse.<br>In case of fire: Use extinguishing media in section 5 for extinction. |
| **Storage:** | Store in a well-ventilated place. Keep container tightly closed.<br>Store in a well-ventilated place. Keep cool.<br>Store locked up. |
| **Disposal:** | Dispose of contents/container according to section 13 of the SDS. |
| **Single Exposure Target Organs:** | No data available. |
| **Repeated Exposure Target Organs:** | No data available. |

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | CAS # | EINEC # | % Composition |
|---|---|---|---|
| methanol | 67-56-1 | 200-659-6 | 99.900000 |
| aldrin | 309-00-2 | 206-215-8 | 0.100000 |

## 4. FIRST-AID MEASURES

| | |
|---|---|
| **Inhalation:** | Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately |
| **Eyes:** | Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention. |
| **Skin Contact:** | Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists. |
| **Ingestion:** | Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this SDS. |

## 5. FIRE- FIGHTING MEASURES

| | |
|---|---|
| **Extinguishing Media:** | Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water may be ineffective but water spray can be used extinguish a fire if swept across the base of the flames. Water can absorb heat and keep exposed material from being damaged by fire. |
| **Fire and/or Explosion Hazards:** | Vapors may be ignited by sparks, flames or other sources of ignition if material is above the flash point giving rise to a fire (Class B). Vapors are heavier than air and may travel to a source of ignition and flash back. |
| **Fire Fighting Methods and Protection:** | Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. |
| **Hazardous Combustion Products:** | Carbon dioxide, Carbon monoxide |

## 6. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| **Personal Precautions and Equipment:** | Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. |
| **Methods for Clean-up:** | Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal |

protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

## 7. HANDLING AND STORAGE

**Handling Technical Measures and Precautions:** Toxic or severely irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment

**Storage Technical Measures and Conditions:** Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**United States:**

| Chemical Name | CAS No. | IDLH | ACGIH STEL | ACGIH TLV-TWA | OSHA Exposure Limit |
|---|---|---|---|---|---|
| methanol | 67-56-1 | 6000 ppm IDLH | 250 ppm STEL | 200 ppm TWA | 200 ppm TWA; 260 mg/m3 TWA |
| aldrin | 309-00-2 | ND | | 0.05 mg/m3 TWA (inhalable fraction and vapor) | 0.25 mg/m3 TWA |

**Personal Protection:**

**Engineering Measures:** Local exhaust ventilation is recommended when generating excessive levels of vapors from handling or thermal processing.

**Respiratory Protection:** Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.If an exposure limit is exceeded or if an operator is experiencing symptoms of inhalation overexposure as explained in Section 3, provide respiratory protection.

**Eye Protection:** Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses.

**Skin Protection:** Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance, color:** | No data available. |
| **Odor:** | Mild |
| **Physical State:** | No data available. |
| **pH:** | No data available |
| **Vapor Density:** | 1.1 (air = 1) |
| **Melting Point:** | -98 °C |
| **Flash Point:** | 52 |
| **Flammability:** | Highly Flammable |
| **Upper Flammable/Explosive Limit, % in air:** | 36.0 |
| **Lower Flammable/Explosive Limit, % in air:** | 6.0 |
| **Autoignition Temperature:** | 464 deg C |
| **Decomposition Temperature:** | No data available. |
| **Specific Gravity:** | 0.791 - 0.792 g/cm3 at 20 °C |
| **Evaporation Rate:** | No data available. |
| **Odor Threshold:** | No data available. |
| **Solubility:** | Moderate; 50-99% |
| **Partition Coefficient: n-octanol in water:** | No data available. |
| **VOC % by weight:** | 99.90 |
| **Molecular Weight:** | 32.04 |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Stability:** | Stable under normal conditions. |
| **Conditions to Avoid:** | No data available. |
| **Materials to Avoid / Chemical Incompatiability:** | Strong oxidizing agents |
| **Hazardous Decomposition Products:** | Carbon dioxide Carbon monoxide |

## 11. TOXICOLOGICAL INFORMATION

**Routes of Entry:** Inhalation, Skin Contact, Eye Contact, Ingestion

**Target Organs Potentially Affected By Exposure:** Eyes, Central nervous system stimulation, Skin, GI Tract, Respiratory Tract

**Chemical Interactions That Change Toxicity:** None Known

**Immediate (Acute) Health Effects by Route of Exposure:**

**Inhalation Irritation:** Can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.

**Inhalation Toxicity:** Harmful! Can cause systemic damage (see "Target Organs)Methanol can cause central nervous system depression and overexposure can cause damage to the optic nerve resulting in visual impairment or blindness.

**Skin Contact:** Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

**Eye Contact:** Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.

**Ingestion Irritation:** Irritating to mouth, throat, and stomach. Can cause abdominal discomfort, nausea, vomiting and diarrhea.Highly toxic and may be fatal if swallowed.

**Ingestion Toxicity:** Toxic if swallowed. May cause target organ failure and/or death.May be fatal if swallowed.

**Long-Term (Chronic) Health Effects:**

**Carcinogenicity:** Contains a probable or known human carcinogen.

**Reproductive and Developmental Toxicity:** Contains a known human reproductive and/or developmental hazard.

**Inhalation:** Upon prolonged and/or repeated exposure, can cause moderate respiratory irritation, dizziness, weakness, fatigue, nausea and headache.Harmful! Can cause systemic damage upon prolonged and/or repeated exposure (see "Target Organs)

**Skin Contact:** Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

**Ingestion:** Toxic if swallowed. May cause target organ failure and/or death.

**Component Toxicological Data:**

**NIOSH:**

| Chemical Name | CAS No. | LD50/LC50 |
|---|---|---|
| Methanol | 67-56-1 | Oral LD50 Rat 5628 mg/kg (Source: NLM_CIP); Inhalation LC50 Rat 83.2 mg/L 4 h (Source: IUCLID) |

**Component Carcinogenic Data:**

**OSHA:**

| Chemical Name | CAS No. |
|---|---|
| No data available. | |

**ACGIH:**

| Chemical Name | CAS No. |
|---|---|
| No data available. | |

**NIOSH:**

| Chemical Name | CAS No. |
|---|---|
| No data available. | |

**NTP:**

| Chemical Name | CAS No. |
|---|---|
| No data available. | |

**IARC:**

| Chemical Name | CAS No. | Group No. |
|---|---|---|
| No data. | | Group 1 |
| No data. | | Group 2A |
| No data. | | Group 2B |

## 12. ECOLOGICAL INFORMATION

**Overview:** Moderate ecological hazard. This product may be dangerous

to plants and/or wildlife.

**Mobility:** No data
**Persistence:** No data
**Bioaccumulation:** No data
**Degradability:** Biodegrades slowly.
**Ecological Toxicity Data:** No data available.

## 13. DISPOSAL CONSIDERATIONS

**Waste Description of Spent Product:** Spent or discarded material is a hazardous waste.
**Disposal Methods:** Dispose of by incineration following Federal, State, Local, or Provincial regulations.
**Waste Disposal of Packaging:** Comply with all Local, State, Federal, and Provincial Environmental Regulations.

## 14. TRANSPORTATION INFORMATION

**United States:**
**DOT Proper Shipping Name:** Methanol
**UN Number:** UN1230
**Hazard Class:** 3
**Packing Group:** II

**International:**
**IATA Proper Shipping Name:** Methanol
**UN Number:** UN1230
**Hazard Class:** 3 (6.1)
**Packing Group:** II

**Marine Pollutant:** No

## 15. REGULATORY INFORMATION

**United States:**

| Chemical Name | CAS# | CERCLA | SARA 313 | SARA EHS 313 | TSCA |
|---|---|---|---|---|---|
| methanol | 67-56-1 | X | X | - | X |
| aldrin | 309-00-2 | X | X | X | - |

**The following chemicals are listed on CA Prop 65:**

| Chemical Name | CAS # | Regulation |
|---|---|---|
| Aldrin | 309-00-2 | Prop 65 Cancer |
| Methanol | 67-56-1 | Prop 65 Devolop Tox |

**State Right To Know Listing:**

| Chemical Name | CAS# | New Jersey | Massachusetts | Pennsylvania | California |
|---|---|---|---|---|---|
| methanol | 67-56-1 | X | X | X | X |
| aldrin | 309-00-2 | X | X | X | X |

## 16. OTHER INFORMATION

**Prior Version Date:** 03/23/11
**Disclaimer:** Restek Corporation provides the descriptions, data and information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. It is provided for your guidance only. Because many factors may affect processing or application/use, Restek Corporation recommends you perform an assessment to determine the suitability of a product for your particular purpose prior to use. No warranties of any kind, either expressed or implied, including fitness for a particular purpose, are made regarding prodcuts described, data or information set forth. In no case shall the descriptions, information, or data provided be considered a part of our terms and conditions of sale. Further, the descriptions, data and information furnished hereunder are given gratis. No obligation or liability for the description, data and information given are assumed. All such being given and accepted at your risk.

# SAFETY DATA SHEET

Version 5.8
Revision Date 06/02/2016
Print Date 08/02/2019

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : α-BHC

Product Number : 48493
Brand : Supelco
Index-No. : 602-042-00-0

CAS-No. : 319-84-6

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Dermal (Category 4), H312
Carcinogenicity (Category 2), H351
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H301 Toxic if swallowed.
H312 Harmful in contact with skin.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

| | |
|---|---|
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing. |
| P281 | Use personal protective equipment as required. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. |
| P302 + P352 + P312 | IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Synonyms : α-1,2,3,4,5,6-Hexachlorocyclohexane

Formula : C6H6Cl6
Molecular weight : 290.83 g/mol
CAS-No. : 319-84-6
EC-No. : 206-270-8
Index-No. : 602-042-00-0

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **(1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane** | | |
| | Acute Tox. 3; Acute Tox. 4; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H301, H312, H351, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
No data available

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | 156.0 - 161.0 °C (312.8 - 321.8 °F) |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 3.80 |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 177.0 mg/kg

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans ((1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane) |
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans ((1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane) |
| ACGIH: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. |
| NTP: | Reasonably anticipated to be a human carcinogen ((1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane) |
| NTP: | Reasonably anticipated to be a human carcinogen ((1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane) |

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: GV3500000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Carassius auratus (goldfish) - 0.12 mg/l - 48.0 h |
| | LC50 - Cyprinus carpio (Carp) - 0.2 mg/l - 48.0 h |
| | LC50 - other fish - 1.49 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 0.20 - 1.70 mg/l - 48 h |
| Toxicity to algae | EC50 - No information available. - > 100.00 mg/l - 48 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
Bioaccumulation: other fish - 96 h
- 0.8 mg/l

Bioconcentration factor (BCF): 250

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solids, organic, n.o.s. ((1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)
Reportable Quantity (RQ): 10 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. ((1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)

**IATA**
UN number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solid, organic, n.o.s. ((1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| (1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane | 319-84-6 | 2007-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| (1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane | 319-84-6 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| (1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane | 319-84-6 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| (1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane | 319-84-6 | 2007-07-01 |

**California Prop. 65 Components**

| | CAS-No. | Revision Date |
|---|---|---|
| WARNING! This product contains a chemical known to the State of California to cause cancer. (1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane | 319-84-6 | 2009-02-01 |
| WARNING! This product contains a chemical known to the State of California to cause cancer. (1α,2α,3β,4α,5β,6β)-1,2,3,4,5,6-Hexachlorocyclohexane | 319-84-6 | 2009-02-01 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |

| | |
|---|---|
| Carc. | Carcinogenicity |
| H301 | Toxic if swallowed. |
| H312 | Harmful in contact with skin. |
| H351 | Suspected of causing cancer. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |
| Health hazard: | 1 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.8 Revision Date: 06/02/2016 Print Date: 08/02/2019

# SAFETY DATA SHEET

Version 4.8
Revision Date 05/03/2017
Print Date 07/13/2017

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : α-Chlordane

Product Number : 442449
Brand : Supelco

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Carcinogenicity (Category 2), H351
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)

| | |
|---|---|
| H302 + H332 | Harmful if swallowed or if inhaled |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |

| | |
|---|---|
| P202 | Do not handle until all safety precautions have been read and understood. |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P312 + P330 | IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Molecular weight : 409.8 g/mol
EC-No. : 225-825-5

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Chlordane** | | |
| | Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; Carc. 2; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H302 + H332, H315, H319, H335, H351, H410 | 90 - 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
No data available

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.
Hazardous components without workplace control parameters

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: crystalline<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | 93.0 - 94.0 °C (199.4 - 201.2 °F) |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |

| | | |
|---|---|---|
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 500 mg/kg

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Chlordane)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Lepomis macrochirus (Bluegill) - 0.0074 mg/l - 96 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Lepomis macrochirus (Bluegill) - 24 h<br>- 0.005 mg/l |
| | Bioconcentration factor (BCF): 322 |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Chlordane)
Reportable Quantity (RQ): Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Chlordane)
Marine pollutant:yes

**IATA**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Chlordane)

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Chlordane | 5103-71-9 | |

| | CAS-No. | Revision Date |
|---|---|---|
| Chlordane | 5103-71-9 | |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Chlordane | 5103-71-9 | |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| Eye Irrit. | Eye irritation |
| H302 | Harmful if swallowed. |
| H302 + H332 | Harmful if swallowed or if inhaled |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.8 Revision Date: 05/03/2017 Print Date: 07/13/2017

# SAFETY DATA SHEET
# Aluminum (pieces)

## 1. Identification

### Product identifier

**Product name** Aluminum (pieces)

**Internal identification** Replaces M-1000-010

**CAS number** 7429-90-5

### Recommended use of the chemical and restrictions on use

**Application** Exterior surface coating.

**Uses advised against** No specific uses advised against are identified.

### Details of the supplier of the safety data sheet

**Supplier** Kurt J Lesker Company

**Manufacturer** Kurt J Lesker Company
1925 Route 51
Jefferson Hills, PA 15025
+1 412-387-9200

Kurt J Lesker Company LTD
United Kingdom
15-16 Burgess Road
Hastings, East Sussex, TN35 4NR
England
Customer Service: +44 (0) 1424 458100
msds@lesker.com

### Emergency telephone number

**Emergency telephone** North America [USA, Canada, Mexico]: 1-866-519-4752
Mainland China: (+86) 4001 2001 74
Europe: {int'l call prefix}-1-760-476-3961
Asia Pacific: {int'l call prefix}-1-760-476-3960
Middle East & Africa: {int'l call prefix}-1-760-476-3959

## 2. Hazard(s) identification

### Classification of the substance or mixture

**Physical hazards** Not Classified

**Health hazards** Not Classified

**Environmental hazards** Not Classified

### Label elements

**Hazard statements** NC Not Classified

### Other hazards

# Aluminum (pieces)

This product does not contain any substances classified as PBT or vPvB. Based on available knowledge of this material, it has been determined to be non-hazardous and will not pose a risk to persons or the environment in its provided form. However, any cutting, welding, melting, grinding, or use for deposition will produce dust, fume, or particulates containing component elements of this material. Exposure to these components may present significant health hazards. Note: Fine particulate may be a combustible dust which, when dispersed in air, may present an explosion hazard.

## 3. Composition/information on ingredients

### Mixtures

| | |
|---|---|
| **Aluminum (pieces)**<br>CAS number: 7429-90-5 | **0 - 100%** |

**Classification**
Not Classified

The full text for all hazard statements is displayed in Section 16.

## 4. First-aid measures

### Description of first aid measures

**General information** If in doubt, get medical attention promptly. Show this Safety Data Sheet to the medical personnel.

**Inhalation** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.

**Ingestion** Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel.

**Skin Contact** Rinse with water.

**Eye contact** Rinse with water. Get medical attention if any discomfort continues.

**Protection of first aiders** First aid personnel should wear appropriate protective equipment during any rescue.

### Most important symptoms and effects, both acute and delayed

**General information** The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation** No specific symptoms known.

**Ingestion** No specific symptoms known.

**Skin contact** Prolonged contact may cause dryness of the skin.

**Eye contact** No specific symptoms known. May be slightly irritating to eyes.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

## 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** The product is flammable. Extinguish with alcohol-resistant foam, carbon dioxide or dry powder. Use fire-extinguishing media suitable for the surrounding fire.

**Unsuitable extinguishing media** Do not use water, if avoidable.

# Aluminum (pieces)

### Special hazards arising from the substance or mixture

**Specific hazards** Reacts with water. Flammable solid. Dust may form explosive mixture with air. Fire-water run-off in sewers may create fire or explosion hazard.

**Hazardous combustion products** Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

### Advice for firefighters

**Protective actions during firefighting** Avoid breathing fire gases or vapors. Evacuate area. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Evacuate area. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated.

### Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

### Methods and material for containment and cleaning up

**Methods for cleaning up** Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Eliminate all ignition sources if safe to do so. No smoking, sparks, flames or other sources of ignition near spillage. Do not allow material to enter confined spaces, due to the risk of explosion. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

**Reference to other sections** For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

## 7. Handling and storage

### Precautions for safe handling

**Usage precautions** Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use. The product is flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

**Advice on general occupational hygiene** Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

### Conditions for safe storage, including any incompatibilities

**Storage precautions** Keep away from oxidizing materials, heat and flames. Avoid contact with water. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

# Aluminum (pieces)

**Storage class** Water-reactive storage.

**Specific end uses(s)**

**Specific end use(s)** The identified uses for this product are detailed in Section 1.

## 8. Exposure Controls/personal protection

**Control parameters**

**Occupational exposure limits**

**Aluminum (pieces)**

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ respirable fraction
as Al
Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust
as Al
Long-term exposure limit (8-hour TWA): ACGIH 1 mg/m³ respirable fraction
A4
OSHA = Occupational Safety and Health Administration.
ACGIH = American Conference of Governmental Industrial Hygienists.
A4 = Not Classifiable as a Human Carcinogen.

**Exposure controls**

**Protective equipment**



**Appropriate engineering controls** Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

**Eye/face protection** Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

**Hand protection** No specific hand protection recommended.

**Other skin and body protection** Wear appropriate clothing to prevent repeated or prolonged skin contact.

**Hygiene measures** Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

**Respiratory protection** Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

**Environmental exposure controls** Keep container tightly sealed when not in use.

## 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

**Appearance** Solid.

**Color** Silver.

**Odor** No characteristic odor.

**Odor threshold** Not applicable.

# Aluminum (pieces)

| | |
|---|---|
| **pH** | Not applicable. |
| **Melting point** | 660°C |
| **Initial boiling point and range** | Not available. |
| **Flash point** | Not applicable. |
| **Evaporation rate** | Not applicable. |
| **Flammability (solid, gas)** | Not applicable. |
| **Upper/lower flammability or explosive limits** | Not applicable. |
| **Vapor pressure** | Not available. |
| **Vapor density** | Not available. |
| **Relative density** | 2.70 @ 25°C |
| **Bulk density** | Not available. |
| **Solubility(ies)** | Insoluble in water. |
| **Partition coefficient** | Not applicable. |
| **Auto-ignition temperature** | Not applicable. |
| **Decomposition Temperature** | Not available. |
| **Viscosity** | Not applicable. |
| **Molecular weight** | 26.98 |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | There are no known reactivity hazards associated with this product. |
| **Stability** | Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions. |
| **Possibility of hazardous reactions** | Reacts strongly with water. The following materials may react strongly with the product: Oxidizing agents. |
| **Conditions to avoid** | Avoid heat, flames and other sources of ignition. Static electricity and formation of sparks must be prevented. |
| **Materials to avoid** | Water. Oxidizing materials. Acids - oxidizing. |
| **Hazardous decomposition products** | Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. |

## 11. Toxicological information

### Information on toxicological effects

**Acute toxicity - oral**

**Notes (oral $LD_{50}$)** Based on available data the classification criteria are not met.

**Acute toxicity - dermal**

**Notes (dermal $LD_{50}$)** Based on available data the classification criteria are not met.

**Acute toxicity - inhalation**

# Aluminum (pieces)

**Notes (inhalation $LC_{50}$)** Based on available data the classification criteria are not met.

**Skin corrosion/irritation**

**Animal data** Based on available data the classification criteria are not met.

**Serious eye damage/irritation**

**Serious eye damage/irritation** Based on available data the classification criteria are not met.

**Respiratory sensitization**

**Respiratory sensitization** Based on available data the classification criteria are not met.

**Skin sensitization**

**Skin sensitization** Based on available data the classification criteria are not met.

**Germ cell mutagenicity**

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

**Carcinogenicity**

**Carcinogenicity** Based on available data the classification criteria are not met.

**IARC carcinogenicity** None of the ingredients are listed or exempt.

**Reproductive toxicity**

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Based on available data the classification criteria are not met.

**Specific target organ toxicity - single exposure**

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

**Specific target organ toxicity - repeated exposure**

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure.

**Aspiration hazard**

**Aspiration hazard** Not relevant. Solid.

**General information** The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation** No specific symptoms known.

**Ingestion** No specific symptoms known.

**Skin Contact** Prolonged contact may cause dryness of the skin.

**Eye contact** No specific symptoms known.

**Route of exposure** Ingestion Inhalation Skin and/or eye contact

**Target Organs** No specific target organs known.

## 12. Ecological Information

**Ecotoxicity** Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

**Toxicity** Based on available data the classification criteria are not met.

**Persistence and degradability**

# Aluminum (pieces)

**Persistence and degradability** Reacts with water.

**Bioaccumulative potential**

**Bio-Accumulative Potential** No data available on bioaccumulation.

**Partition coefficient** Not applicable.

**Mobility in soil**

**Mobility** No data available.

**Other adverse effects**

**Other adverse effects** None known.

## 13. Disposal considerations

**Waste treatment methods**

**General information** The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

**Disposal methods** Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

## 14. Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

**UN Number**

Not applicable.

**UN proper shipping name**

Not applicable.

**Transport hazard class(es)**

No transport warning sign required.

**Transport labels**

No transport warning sign required.

**DOT transport labels**

No transport warning sign required.

**Packing group**

Not applicable.

**Environmental hazards**

**Environmentally Hazardous Substance**

No.

**Special precautions for user**

# Aluminum (pieces)

Based on available knowledge of this material, it has been determined to be non-hazardous and will not pose a risk to persons or the environment in its provided form. However, any cutting, welding, melting, grinding, or use for deposition will produce dust, fume, or particulates containing component elements of this material. Exposure to these components may present significant health hazards. Note: Fine particulate may be a combustible dust which, when dispersed in air, may present an explosion hazard.

**DOT TIH Zone** Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

### US Federal Regulations

**SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**
None of the ingredients are listed or exempt.

**CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)**
None of the ingredients are listed or exempt.

**SARA Extremely Hazardous Substances EPCRA Reportable Quantities**
None of the ingredients are listed or exempt.

**SARA 313 Emission Reporting**
None of the ingredients are listed or exempt.

**CAA Accidental Release Prevention**
None of the ingredients are listed or exempt.

**FDA - Essential Chemical**
None of the ingredients are listed or exempt.

**FDA - Precursor Chemical**
None of the ingredients are listed or exempt.

**SARA (311/312) Hazard Categories**
None of the ingredients are listed or exempt.

**OSHA Highly Hazardous Chemicals**
None of the ingredients are listed or exempt.

### US State Regulations

**California Proposition 65 Carcinogens and Reproductive Toxins**
None of the ingredients are listed or exempt.

**California Air Toxics "Hot Spots" (A-I)**
None of the ingredients are listed or exempt.

**California Air Toxics "Hot Spots" (A-II)**
None of the ingredients are listed or exempt.

**California Directors List of Hazardous Substances**
None of the ingredients are listed or exempt.

**Massachusetts "Right To Know" List**
None of the ingredients are listed or exempt.

# Aluminum (pieces)

**Rhode Island "Right To Know" List**
None of the ingredients are listed or exempt.

**Minnesota "Right To Know" List**
None of the ingredients are listed or exempt.

**New Jersey "Right To Know" List**
None of the ingredients are listed or exempt.

**Pennsylvania "Right To Know" List**
None of the ingredients are listed or exempt.

**Inventories**

**US - TSCA**
None of the ingredients are listed or exempt.

**US - TSCA 12(b) Export Notification**
None of the ingredients are listed or exempt.

## 16. Other information

| | |
|---|---|
| **Training advice** | Only trained personnel should use this material. |
| **Revision date** | 5/9/2018 |
| **Revision** | 7 |
| **Supersedes date** | 5/9/2018 |
| **SDS No.** | 4661 |

**End of SDS**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

# SAFETY DATA SHEET

Version 4.9
Revision Date 04/20/2015
Print Date 12/11/2015

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Anthracene

Product Number : A89200
Brand : Aldrich

CAS-No. : 120-12-7

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.

| | |
|---|---|
| P280 | Wear protective gloves. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Photosensitizer., Lachrymator.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | $C_{14}H_{10}$ |
| Molecular weight | : | 178.23 g/mol |
| CAS-No. | : | 120-12-7 |
| EC-No. | : | 204-371-1 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Anthracene** Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH) | | |
| | Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H315, H319, H335, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
No data available

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Anthracene | 120-12-7 | TWA | 0.200000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | Remarks | 1910.1002<br>As used in §1910.1000 (Table Z-1), coal tar pitch volatiles include the fused polycyclic hydrocarbons which volatilize from the distillation residues of coal, petroleum (excluding asphalt), wood, and other organic matter. Asphalt (CAS 8052-42-4, and CAS 64742-93-4) is not covered under the 'coal tar pitch volatiles' standard<br>OSHA specifically regulated carcinogen | | |

| | | | | |
|---|---|---|---|---|
| | | TWA | 0.100000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>NIOSH considers coal tar, coal tar pitch, and creosote to be coal tar products.<br>cyclohexane-extractable fraction<br>See Appendix C<br>See Appendix A | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| Anthracene | 120-12-7 | 1-Hydroxypyrene (1-HP) | | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | End of shift at end of workweek | | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Chloroprene
Minimum layer thickness: 0.6 mm
Break through time: 480 min
Material tested:Camapren® (KCL 722 / Aldrich Z677493, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 30 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: crystalline<br>Colour: beige |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 210 - 215 °C (410 - 419 °F) - lit. |
| f) | Initial boiling point and boiling range | 340 °C (644 °F) - lit. |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Lower explosion limit: 0.6 %(V) |
| k) | Vapour pressure | 1.3 hPa (1.0 mmHg) at 145.0 °C (293.0 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 4.45 |
| p) | Auto-ignition temperature | 540.0 °C (1,004.0 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents, Hypochlorites

### 10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
Inhalation: No data available

Dermal: No data available

LD50 Intraperitoneal - Mouse - 430 mg/kg

**Skin corrosion/irritation**
Skin - Mouse
Result: Mild skin irritation

**Serious eye damage/eye irritation**
Irritating to eyes. The preceding data, or interpretation of data, was determined using Quantitative Structure Activity Relationship (QSAR) modeling.

**Respiratory or skin sensitisation**
Causes photosensitivity. Exposure to light can result in allergic reactions resulting in dermatologic lesions, which can vary from sunburnlike responses to edematous, vesiculated lesions, or bullae

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

| | |
|---|---|
| IARC: | 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Anthracene) |
| ACGIH: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | OSHA specifically regulated carcinogen (Anthracene) |

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**
Inhalation - May cause respiratory irritation.
The preceding data, or interpretation of data, was determined using Quantitative Structure Activity Relationship (QSAR) modeling.

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: CA9350000

Possible tumor promoter., Headache, Nausea, Weakness

Blood -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Lepomis macrochirus (Bluegill) - 0.001 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 0.10 mg/l - 48 h |

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
Indication of bioaccumulation.
Bioaccumulation Pimephales promelas (fathead minnow) - 42 d
- 0.01191 mg/l

Bioconcentration factor (BCF): 649

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

No data available

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Anthracene)
Reportable Quantity (RQ): 5000 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Anthracene)
Marine pollutant:yes

**IATA**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Anthracene)

**Further information**
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Anthracene | 120-12-7 | 2007-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Anthracene | 120-12-7 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Anthracene | 120-12-7 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Anthracene | 120-12-7 | 2007-07-01 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| Anthracene | 120-12-7 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Eye Irrit. | Eye irritation |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.9 Revision Date: 04/20/2015 Print Date: 12/11/2015

# SAFETY DATA SHEET

Version 5.2
Revision Date 02/27/2015
Print Date 05/01/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Aroclor 1254

Product Number : 48586
Brand : Supelco
Index-No. : 602-039-00-4

CAS-No. : 11097-69-1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 4), H302
Specific target organ toxicity - repeated exposure (Category 2), H373
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)
H302 Harmful if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.

| | |
|---|---|
| P314 | Get medical advice/ attention if you feel unwell. |
| P391 | Collect spillage. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

CAS-No. : 11097-69-1
Index-No. : 602-039-00-4

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Aroclor 1254** | | |
| | Acute Tox. 4; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H302, H373, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Nature of decomposition products not known.

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Non Combustible Liquids

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Aroclor 1254 | 11097-69-1 | TWA | 0.5 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | Remarks | Skin designation | | |
| | | TWA | 0.500000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Skin designation | | |
| | | TWA | 0.5 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Liver damage<br>Chloracne<br>Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |
| | | TWA | 0.500000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Liver damage<br>Chloracne<br>Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |
| | | TWA | 0.5 mg/m3 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| | | Skin notation | | |
| | | TWA | 0.001000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix A | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | No data available |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition | No data available |

temperature

| | | |
|---|---|---|
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 1,010 mg/kg

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
Rat
Liver
Unscheduled DNA synthesis

Rat
Liver
DNA damage

Mouse
fibroblast
Morphological transformation.

Rat
Morphological transformation.

Rat
DNA damage

Rat
DNA damage

**Carcinogenicity**

Carcinogenicity - Rat - Oral
Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Gastrointestinal:Tumors.

Carcinogenicity - Rat - Oral
Tumorigenic:Carcinogenic by RTECS criteria. Liver:Tumors.

Carcinogenicity - Mouse - Skin
Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Skin and Appendages: Other: Tumors.
Tumorigenic:Tumors at site or application.

Carcinogenicity - Rat - Oral
Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Gastrointestinal:Tumors.

Carcinogenicity - Mouse - Oral
Tumorigenic:Neoplastic by RTECS criteria. Liver:Tumors.

Carcinogenicity - Mouse - Intraperitoneal
Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Tumorigenic Effects: Uterine tumors. Lungs, Thorax, or Respiration:Tumors.

| | |
|---|---|
| IARC: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

Reproductive toxicity - Rabbit - Oral
Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).
Effects on Fertility: Abortion. Effects on Embryo or Fetus: Fetal death.

Reproductive toxicity - Rabbit - Oral
Effects on Newborn: Biochemical and metabolic.

Reproductive toxicity - Rat - Oral
Effects on Newborn: Biochemical and metabolic.

Reproductive toxicity - Rat - Oral
Effects on Newborn: Behavioral.

Reproductive toxicity - Rat - Oral
Effects on Newborn: Delayed effects.

Reproductive toxicity - Rat - Intraperitoneal
Maternal Effects: Other effects. Effects on Newborn: Biochemical and metabolic.

Reproductive toxicity - Mouse - Oral
Effects on Newborn: Behavioral.

Reproductive toxicity - Mammal - Oral
Effects on Fertility: Female fertility index (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated ).

No data available

Developmental Toxicity - Rat - Oral

Specific Developmental Abnormalities: Hepatobiliary system.

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence
Stomach - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Oncorhynchus mykiss (rainbow trout) - 0.22 µg/l - 96.0 h |
| Toxicity to algae | LC50 - Algae - 0.015 mg/l - 28 h |

### 12.2 Persistence and degradability

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Pimephales promelas (fathead minnow) - 8 Months<br>- 1.8 µg/l |
| | Bioconcentration factor (BCF): 238,000 |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2315 Class: 9 Packing group: II
Proper shipping name: Polychlorinated biphenyls, liquid
Reportable Quantity (RQ): 1 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 2315 Class: 9 Packing group: II EMS-No: F-A, S-A

Proper shipping name: POLYCHLORINATED BIPHENYLS, LIQUID
Marine pollutant: yes

**IATA**

UN number: 2315 Class: 9 Packing group: II
Proper shipping name: Polychlorinated biphenyls, liquid

## 15. REGULATORY INFORMATION

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Aroclor 1254 | 11097-69-1 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Aroclor 1254 | 11097-69-1 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Aroclor 1254 | 11097-69-1 | 1993-04-24 |

**California Prop. 65 Components**

| | | |
|---|---|---|
| WARNING! This product contains a chemical known to the State of California to cause cancer.<br>Aroclor 1254 | CAS-No.<br>11097-69-1 | Revision Date<br>1990-06-30 |
| WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.<br>Aroclor 1254 | CAS-No.<br>11097-69-1 | Revision Date<br>1990-06-30 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| H302 | Harmful if swallowed. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| STOT RE | Specific target organ toxicity - repeated exposure |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 1 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 1 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.2 Revision Date: 02/27/2015 Print Date: 05/01/2016

# SAFETY DATA SHEET

Version 5.3
Revision Date 06/25/2015
Print Date 05/11/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : AROCLOR 1260

Product Number : CRM48736
Brand : Supelco

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Carcinogenicity (Category 1B), H350

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H350 May cause cancer.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

**Hazardous components**

| Component | | Classification | Concentration |
|---|---|---|---|
| **Distillates (petroleum), hydrotreated middle** | | | |
| CAS-No.<br>EC-No.<br>Index-No. | 64742-46-7<br>265-148-2<br>649-221-00-X | Carc. 1B; H350 | >= 90 - <= 100 % |
| **Baseoil - unspecified** | | | |
| CAS-No.<br>EC-No.<br>Index-No. | 64742-53-6<br>265-156-6<br>649-466-00-2 | Carc. 1B; H350 | >= 30 - < 50 % |
| **2,6-di-tert-Butyl-p-cresol** | | | |
| CAS-No.<br>EC-No. | 128-37-0<br>204-881-4 | Aquatic Acute 1; Aquatic Chronic 1; H410 | >= 0.1 - < 1 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
Nature of decomposition products not known.

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | TWA | 500.000000 ppm 2,000.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | Remarks | The value in mg/m3 is approximate. | | |

| | | | | |
|---|---|---|---|---|
| | | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 5.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 10.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 5 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 5 mg/m3 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| | | TWA | 5 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 10 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| Baseoil - unspecified | 64742-53-6 | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 5.000000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Not classifiable as a human carcinogen | | |
| | | TWA | 5.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 10.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | No data available |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
No data available

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

| | |
|---|---|
| IARC: | 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2,6-di-tert-Butyl-p-cresol) |
| IARC: | 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Distillates (petroleum), hydrotreated middle) |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Nerves. - (Aroclor 1260)

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity
No data available

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
No data available

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
Not dangerous goods

**IMDG**
Not dangerous goods

**IATA**
Not dangerous goods

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | 1989-08-11 |
| Baseoil - unspecified | 64742-53-6 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | 1989-08-11 |
| Baseoil - unspecified | 64742-53-6 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | 1989-08-11 |
| Baseoil - unspecified | 64742-53-6 | 1993-04-24 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| Aroclor 1260 | 11096-82-5 | 2008-08-01 |
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | 2013-12-20 |

| WARNING: This product contains a chemical known to the | CAS-No. | Revision Date |
|---|---|---|

| | | |
|---|---|---|
| State of California to cause birth defects or other reproductive harm. | 11096-82-5 | 2008-08-01 |
| Aroclor 1260 | | |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H350 | May cause cancer. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.3 Revision Date: 06/25/2015 Print Date: 05/11/2016

AccuStandard, Inc.
125 Market St., New Haven, CT 06513 USA
Tel: 203-786-5290 Fax: 203-786-5287

*SAFETY DATA SHEET*

## SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### 1.1 - Product Identifiers

Catalog Name: C-268S-M

Description: Aroclor 1268 in Methanol

### 1.2 - Relevant Identified Uses of the Substance or Mixture

Laboratory Chemical Reference Material

### 1.3 - Supplier Details

Company: AccuStandard, Inc.
125 Market St.
New Haven, CT 06513 USA

Telephone Number: 203-786-5290

Fax: 203-786-5287

Email: edocs@accustandard.com

### 1.4 - Emergency Telephone Number

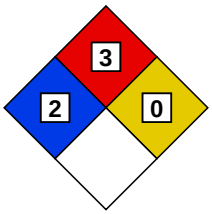
Emergency Phone #: AccuStandard, Inc.
1-203-502-7070 (USA)
+001-203-502-7070 (International)

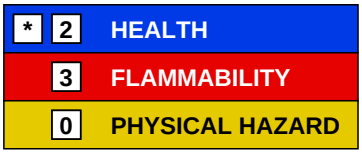
24 hours / 7 days a week

## SECTION 2 - HAZARDS IDENTIFICATION

### 2.1 - GHS Label Elements






**Signal Word: Danger**

**Hazard Codes:**

H225 - Highly Flammable (Flammable liquids, category 2)

H301 - Toxic if swallowed. (Acute toxicity, oral, category 3)

H311 - Toxic if absorbed through skin. (Acute toxicity, dermal, category 3)

H315 - Irritating to skin. (Skin corrosion/irritation, category 2)

H320 - Irritating to eyes. (Eye damage/irritation, category 2B)

H332 - Harmful if inhaled. (Acute toxicity, inhalation, category 4)

H336 - Overexposure may cause dizziness, nausea, muscle weakness, narcosis and respiratory failure.

H360 - California Proposition 65 Warning: This product contains a component (or components) that may cause birth defects or other reproductive harm in a quantity greater than or equal to 0.1%.

H370 - Causes damage to organs. (Specific target organ toxicity, single exposure, category 1)

**Precautionary Codes:**

## SECTION 2 - HAZARDS IDENTIFICATION *- continued*

### 2.1 - GHS Label Elements *- continued*

P202 - This product should only by used by persons trained in the safe handling of hazardous chemicals.

P233 - Store in a tightly closed container. (P404)

P262 - Do not get in eyes, on skin or clothing.

P264 - Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

P280 - Protective gloves must be worn to prevent skin contact.

P284 - Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), or a risk assessment shows air-purifying respirators are appropriate, use of a NIOSH/MSHA approved air supplied respirator is advised. Use a full-face respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges in absence of proper environmental control. Always use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Engineering and/or administrative controls should be implemented to reduce exposure.

P331 - Ingestion: Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

P338 - Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

P360 - Skin contact: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

### 2.2 - Other Hazards

#### 2.2.1 - Symptom of Exposure Health/Environment

Highly Flammable (Flammable liquids, category 2)

Causes damage to organs. (Specific target organ toxicity, single exposure, category 1)

After ingestion or inhalation, initial symptoms may be only that of mild intoxication, but may become severe after 12 or 18 hours.

POISON: May be fatal or cause blindness if swallowed.

Overexposure may cause dizziness, nausea, muscle weakness, narcosis and respiratory failure.

#### 2.2.2 - Potential Health Effects

Irritating to eyes. (Eye damage/irritation, category 2B)

Irritating to skin. (Skin corrosion/irritation, category 2)

Toxic if absorbed through skin. (Acute toxicity, dermal, category 3)

Irritating to mucous membrane and upper respiratory system.

Harmful if inhaled. (Acute toxicity, inhalation, category 4)

Toxic if swallowed. (Acute toxicity, oral, category 3)

#### 2.2.3 - Routes of Entry

Inhalation, ingestion or skin contact.

#### 2.2.4 - Carcinogenicity

California Proposition 65 Warning: This product contains a component (or components) that may cause birth defects or other reproductive harm in a quantity greater than or equal to 0.1%.

California Proposition 65 Warning: This product contains a component (or components) that may cause cancer in a concentration less than 0.1%.

Contains one or more components that are classified (ACGIH, IARC, NTP, OSHA) as a possible cancer hazard in quantities less than 0.1%.

## SECTION 3 - COMPOSITION / ANALYTES DATA

Description: Aroclor 1268 in Methanol

| | | | ACGIH -TLV (mg/m³) | | | OSHA -PEL (mg/m³) | | |
|---|---|---|---|---|---|---|---|---|
| Analyte | CAS # | % Concentration | TWA | STEL | Skin | TWA | STEL | Skin |
| Aroclor 1268 | 11100-14-4 | 0.004 | | | | | | |
| Methanol | 67-56-1 | 99.996 | | | | 260 | | |

## SECTION 4 - FIRST AID MEASURES

### 4.1 - First Aid Procedures - General

Get medical assistance for all cases of overexposure.

### 4.2 - Eye Contact

Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. (P338)

### 4.3 - Skin Contact

Skin contact: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse. (P360)

### 4.4 - Inhalation

Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

### 4.5 - Ingestion

Ingestion: Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. (P331)

## SECTION 5 - FIRE FIGHTING MEASURES

### 5.1 - Flammable Properties

Dangerous fire and explosive hazard.

Containers can build up pressure if exposed to heat.

Vapors can travel to a source of ignition and flash back.

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

### 5.2 - Extinguishing Media

Use alcohol foam, carbon dioxide, dry chemical, or water spray when fighting fires involving this material.

### 5.3 - Protection of Firefighters

As in any fire, wear self-contained breathing apparatus pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### 6.1 - Spill Response

Wear suitable protective equipment listed under Exposure Controls / Personal Protection. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Dispose as hazardous waste. Comply with Federal, State and local regulations.

## SECTION 7 - HANDLING AND STORAGE

Store in a tightly closed container. (P404)

Store in a cool area away from ignition sources and oxidizers.

Sonicate before use.

Avoid breathing vapors or mists.

Use with adequate ventilation.

Do not get in eyes, on skin or clothing. (P262)

Avoid prolonged or repeated exposure.

This product should only by used by persons trained in the safe handling of hazardous chemicals. (P202)

## SECTION 8 - EXPOSURE CONTROLS

### 8.1 - Engineering Controls/PPE

Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available. (P264)

### 8.2 - General Hygene Considerations

Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), or a risk assessment shows air-purifying respirators are appropriate, use of a NIOSH/MSHA approved air supplied respirator is advised. Use a full-face respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges in absence of proper environmental control. Always use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Engineering and/or administrative controls should be implemented to reduce exposure.

Material should be handled or transferred in an approved fume hood or with adequate ventilation.

Protective gloves must be worn to prevent skin contact. (P280)

(Chloroprene, natural rubber, nitrile, or equivalent)

Use eye protection tested and approved under the appropriate government standards such as NIOSH (US) or EN 166 (EU).

All recommendations are advisory only and must be evaluated by an industrial hygienist and/or safety officer familiar with the specific situation of anticipated use, such as concentration and amount of the substance in the workplace. Any recommendation should not be construed as offering an approval for any specific use of the product.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid

Odor: N/A

Odor Threshold: N/A

pH: N/A

Melting Point: -93.9 °C

Boiling Point: 65 °C

Flash Point: 52 °F (11 °C) (tcc)

Evaporation Rate (Butyl Acetate=1): 5.9

Flammability Class: N/A

Lower Flammability Level: 6.7

Upper Flammability Level: 36.5

Vapor Pressure: 97 mmHg (20 °C)

Vapor Density (Air = 1): 1.1 g/L

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES *- continued*

Specific Gravity: 0.791 g/cm3

Solubility in Water: Very soluble

Partition Coefficient: log Pow: -0.77

Autoignition Temperature: 385 °C

Decomposition Temperature: N/A

Viscosity: N/A

VOC Content: N/A

Percent Volatile: 99.9+

## SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Materials to Avoid: Acids
Oxidizers

Hazardous Decomposition: Oxides of carbon; Formaldehyde

Hazardous Polymerization: Will not occur

Condition to Avoid: Heat; Contact with ignition sources

## SECTION 11 - TOXICOLOGICAL INFORMATION

**Human Health Toxicity**

See section 2 for specific toxicological information for the ingredients of this product.

LD50 (Oral): Human - 143 mg/kg; Rat - 1500 mg/kg

LD50 (Dermal) : Rabbit - >2000 mg/kg

LC50 (Inhalation): Rat - >20 mg/L

WARNING: This product contains chemical(s) known to the state of California to cause cancer and to cause birth defects or other reproductive harm.

No other information related to the toxicological properties of this product is available at this time.

## SECTION 12 - ECOLOGICAL INFORMATION

**Environmental Toxicity**

By complying with sections 6 and 7 there should be no release to the environment.

LC50 (Fish): >1000 mg/L 96H

EC50 (Aquatic Invertebrate): >1000 mg/L 48H

BCF: 1.0

Hydrolyzes readily on contact with water. Readily biodegradable.

No other information related to the ecological properties of this product is available at this time.

## SECTION 13 - DISPOSAL CONSIDERATIONS

Recycle or incinerate at any EPA approved facility or dispose in compliance with Federal, State and local regulations. Empty containers must be triple-rinsed prior to disposal.

## SECTION 14 - TRANSPORT INFORMATION

Transportation Information (DOT/IATA)

UN Number: UN1230

Class: 3

Packing Group: II

Proper Shipping Name: Methanol

Poison by Inhalation: No

Marine Pollutant: No

## SECTION 15 - REGULATORY INFORMATION

WARNING: This product contains chemical(s) known to the state of California to cause cancer and to cause birth defects or other reproductive harm.

This product contains a compound or compounds subject to EU Regulation (EC) No 1907/2006 (REACH) on Annex XIV, Annex XVII, and/or Article 59. Refer to the below table for details.

This product is subject to SARA section 313 reporting requirements.

All components are listed on the TSCA Inventory.

**For laboratory, research and development use only. Not for manufacturing or commercial purposes.**

In addition to federal and state regulations, local regulations may apply. Check with your local regulatory authorities.

| | | | REACH (1907/2006) | | |
|---|---|---|---|---|---|
| Analyte | CAS # | % Concentration | Annex XIV | Annex XVII | Article 59 |
| Methanol | 67-56-1 | 99.996 | | X | |

## SECTION 16 - OTHER INFORMATION

This document has been designed to meet the requirements of OSHA, ANSI, GHS and CHIPs regulations. Chemicals are classified using the Globally Harmonized System for Classification and Labeling of Chemicals and CLP Regulation (EC) No. 1272/2008.

The statements contained herein are offered for informational purposes only and are based on technical data that we believe to be accurate. The manufacturer will not assume any liability for the accuracy and completeness of this information. Final determination of the suitability of the material is the responsibility of the user. Although certain hazards are described herein, the user should not presume that these are the only hazards that exist. Since conditions and manner of use are outside of the manufacturers control, we make

**NO WARRANTY OF MERCHANTABILITY, EXPRESSED OR IMPLIED, AND ASSUME NO LIABILITY RESULTING FROM ITS USE.**

Legend : N/A = Not Available ND = Not Determined NR = Not Regulated

Alteration of any information contained herein without written permission from the manufacturer is strictly prohibited.

## HMIS/NFPA HAZARD INDEX

0 - Minimal
1 - Slight
2 - Moderate
3 - Serious
4 - Severe

* - Additional Hazard

## GHS HAZARD INDEX

Category 1 - Most Severe
Category 5 - Least Severe

**** End of Document ****

# SAFETY DATA SHEET

Version 6.10
Revision Date 09/06/2024
Print Date 09/07/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Arsenic

Product Number : 202657
Brand : Aldrich
Index-No. : 033-001-00-X
CAS-No. : 7440-38-2

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 3), H331
Skin irritation (Category 2), H315



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Serious eye damage (Category 1), H318
Carcinogenicity (Category 1A), H350
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram



| | |
|---|---|
| Signal Word | Danger |
| Hazard Statements | |
| H301 + H331 | Toxic if swallowed or if inhaled. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H350 | May cause cancer. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| Precautionary Statements | |
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P261 | Avoid breathing dust. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 + P311 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor. |
| P305 + P351 + P338 + P310 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none



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## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | As |
| Molecular weight | : | 74.92 g/mol |
| CAS-No. | : | 7440-38-2 |
| EC-No. | : | 231-148-6 |
| Index-No. | : | 033-001-00-X |

| Component | Classification | Concentration |
|---|---|---|
| **arsenic** | | |
| | Acute Tox. 3; Skin Irrit. 2; Eye Dam. 1; Carc. 1A; Aquatic Acute 1; Aquatic Chronic 1; H301, H331, H315, H318, H350, H400, H410<br>M-Factor - Aquatic Acute: 10<br>M-Factor - Aquatic Chronic: 1 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

**If swallowed**
If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.



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### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture
Nature of decomposition products not known.
Not combustible.
Ambient fire may liberate hazardous vapours.

### 5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information
Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions
Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections
For disposal see section 13.



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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Work under hood. Do not inhale substance/mixture.

**Hygiene measures**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

**Storage class**
Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| arsenic | 7440-38-2 | TWA | 0.01 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Lung cancer<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Confirmed human carcinogen | | |
| | | C | 0.0020 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix A<br>15 minute ceiling value | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| arsenic | 7440-38-2 | inorganic arsenic plus methylated metabolites | 15µg/g creatinine | Urine | ACGIH - Biological Exposure Indices (BEI) |



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| | | | | | |
|---|---|---|---|---|---|
| | Remarks | End of shift | | | |
| | | inorganic arsenic plus methylated metabolites | 15µg/g creatinine | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | | End of the workweek (After four or five consecutive working days with exposure) | | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

**Skin protection**
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

**Body Protection**
protective clothing

**Respiratory protection**
Recommended Filter type: Filter type P3
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.



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**Control of environmental exposure**
Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: powder<br>Color: gray |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/ range: 817 °C (1503 °F) - lit. |
| f) | Initial boiling point and boiling range | 613 °C 1135 °F - lit. |
| g) | Flash point | ()Not applicable |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | No data available |
| l) | Vapor density | No data available |
| m) | Density | 5.727 g/mL at 25 °C (77 °F) - lit. |
| | Relative density | 5.622.4 °C - OECD Test Guideline 109 |
| n) | Water solubility | ca.0.0106 g/l at 20 °C (68 °F) - OECD Test Guideline 105 - slightly soluble |
| o) | Partition coefficient: n-octanol/water | Not applicable for inorganic substances |
| p) | Autoignition temperature | > 430 °C (> 806 °F)does not ignite |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | none |

### 9.2 Other safety information

No data available



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## SECTION 10: Stability and reactivity

### 10.1 Reactivity
No data available

### 10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions
Exothermic reaction with:
Aluminum
Bromine
bromates
chlorates
iodates
Nitric acid
Risk of ignition or formation of inflammable gases or vapours with:
nitrates
Alkali metals
Zinc
Reducing agents
Strong oxidizing agents
Risk of explosion with:
potassium permanganate
azides
halogen-halogen compounds
Peroxides
nitrogen trichloride

### 10.4 Conditions to avoid
Heat. Exposure to air may affect product quality.
no information available

### 10.5 Incompatible materials
No data available

### 10.6 Hazardous decomposition products
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Mouse - 145 mg/kg
Remarks: Behavioral:Ataxia.
Diarrhea
(RTECS)
Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)



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Inhalation: No data available
Dermal: No data available
No data available

**Skin corrosion/irritation**
Skin - In vitro study
Result: Irritating to skin. - 15 min
Remarks: (ECHA)

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Causes serious eye damage. - 24 h
(OECD Test Guideline 405)

**Respiratory or skin sensitization**
Maximization Test - Guinea pig
Result: negative
(OECD Test Guideline 406)

**Germ cell mutagenicity**
Test Type: Ames test
Test system: Escherichia coli
Result: negative
Remarks: (ECHA)

**Carcinogenicity**
May cause cancer. Positive evidence from human epidemiological studies.

| | |
|---|---|
| IARC: | 1 - Group 1: Carcinogenic to humans (arsenic) |
| NTP: | Known - Known to be human carcinogen (arsenic) |
| OSHA: | OSHA specifically regulated carcinogen (arsenic) |

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

RTECS: CG0525000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

The following applies to arsenic and its compounds in general: they take effect as capillary and enzyme toxins. Symptoms of arsenic poisoning: acute: after inhalation, mucosal irritations with coughing, dyspnoea, pain in the thorax. Perforations within the respiratory tract are possible. After oral uptake, gastrointestinal disorders with vomiting, diarrhoea, and spasms, CNS disorders with headache, confusion, shaking fits and disturbed consciousness, cardiovascular disorders all the way to circulatory collapse. Chronic: exanthema, dermal lesions in the form of hyperkeratosis and hypermelanosis, loss of hair,



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conjunctivitis and polyneuropathy, impaired hepatic function, and renal damage. After accumulation in the liver, kidneys, and skin, arsenic is eliminated from the organism only slowly. Experience has shown arsenic compounds to be carcinogenic in man.

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | static test LC50 - Oreochromis mossambicus (Mozambique tilapia) - 28.68 mg/l - 96 h<br>Remarks: (ECHA) |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Bosmina longirostris (water flea) - 0.85 mg/l - 48 h<br>Remarks: (ECHA) |
| Toxicity to algae | static test NOEC - Macrocystis pyrifera (brown algae) - 0.04 mg/l - 42 h<br>Remarks: (ECHA) |
| Toxicity to bacteria | static test EC50 - activated sludge - 10.6 mg/l - 10 Days<br>Remarks: (ECHA) |
| Toxicity to fish(Chronic toxicity) | flow-through test NOEC - Pimephales promelas (fathead minnow) - 2.13 mg/l - 35 d<br>Remarks: (ECHA) |
| Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) | flow-through test NOEC - Shrimp - 0.631 mg/l - 51 d<br>Remarks: (ECHA) |

### 12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available



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### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**

UN number: 1558 Class: 6.1 Packing group: II
Proper shipping name: Arsenic
Reportable Quantity (RQ): 1 lbs
Reportable Quantity (RQ): 1 lbs
Poison Inhalation Hazard: No

**IMDG**

UN number: 1558 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: ARSENIC
Marine pollutant : yes

**IATA**

UN number: 1558 Class: 6.1 Packing group: II
Proper shipping name: Arsenic

## SECTION 15: Regulatory information

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| arsenic | 7440-38-2 | 1 | 1 |
| arsenic | 7440-38-2 | 1 | 1 (D004) |



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**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

| | | |
|---|---|---|
| **SARA 311/312 Hazards** | : | Acute Health Hazard<br>Chronic Health Hazard |
| **SARA 313** | : | The following components are subject to reporting levels established by SARA Title III, Section 313: |

| | | |
|---|---|---|
| arsenic | 7440-38-2 | >= 90 - <= 100 % |

**US State Regulations**

**Massachusetts Right To Know**

| | |
|---|---|
| arsenic | 7440-38-2 |

**Pennsylvania Right To Know**

| | |
|---|---|
| arsenic | 7440-38-2 |

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

| | |
|---|---|
| arsenic | 7440-38-2 |

**Washington Chemicals of High Concern**

| | |
|---|---|
| arsenic | 7440-38-2 |

**California Prop. 65**

WARNING: This product can expose you to chemicals including arsenic, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

**The ingredients of this product are reported in the following inventories:**

| | | |
|---|---|---|
| TSCA | : | All substances listed as active on the TSCA inventory |

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16: Other information

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact



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Version: 6.10 Revision Date: 09/06/2024 Print Date: 09/07/2024



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# SAFETY DATA SHEET

Version 4.5
Revision Date 03/02/2015
Print Date 05/24/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Barium

Product Number : 237094
Brand : Aldrich

CAS-No. : 7440-39-3

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Substances and mixtures, which in contact with water, emit flammable gases (Category 2), H261
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H261 In contact with water releases flammable gases.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statement(s)
P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P231 + P232 Handle under inert gas. Protect from moisture.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.

| | |
|---|---|
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 + P312 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P335 + P334 | Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |
| P402 + P404 | Store in a dry place. Store in a closed container. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | Ba |
| Molecular weight | : | 137.33 g/mol |
| CAS-No. | : | 7440-39-3 |
| EC-No. | : | 231-149-1 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Barium** | | |
| | Water-react. 2; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H261, H315, H319, H335 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Dry powder

### 5.2 Special hazards arising from the substance or mixture
Barium oxide

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No smoking.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.
Never allow product to get in contact with water during storage.

Store under inert gas.
Storage class (TRGS 510): Hazardous materials, which set free flammable gases upon contact with water

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Barium | 7440-39-3 | TWA | 0.500000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Eye, skin, & Gastrointestinal irritation<br>Muscular stimulation<br>Not classifiable as a human carcinogen | | |

| | | | | |
|---|---|---|---|---|
| | | TWA | 0.500000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 0.500000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Eye irritation<br>Muscular stimulation<br>Skin irritation<br>Gastrointestinal irritation<br>Not classifiable as a human carcinogen | | |
| | | TWA | 0.500000 mg/m3 | USA. NIOSH Recommended Exposure Limits |

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
impervious clothing, Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance Form: Rods

| | | |
|---|---|---|
| | | Colour: grey |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 725 °C (1,337 °F) - lit. |
| f) | Initial boiling point and boiling range | 1,640 °C (2,984 °F) - lit. |
| g) | Flash point | Not applicable |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 3.6 g/mL at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
Reacts violently with water.

**10.4 Conditions to avoid**
Exposure to moisture

**10.5 Incompatible materials**
Oxidizing agents, Water, acids, Oxygen, Chlorinated solvents, Carbon dioxide (CO2), Halogens, Halogenated hydrocarbon, Alcohols, Sulphur compounds, Hydrogen sulfide gas

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
No data available

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

| | |
|---|---|
| IARC: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: CQ8370000

Stomach/intestinal disorders, Nausea, Vomiting, Drowsiness, Dizziness, Gastrointestinal disturbance, Weakness, Tremors, Seizures.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | mortality NOEC - Cyprinodon variegatus (sheepshead minnow) - 500 mg/l - 96 h |
| | LC50 - Cyprinodon variegatus (sheepshead minnow) - > 500 mg/l - 96 h |

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

No data available

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1400 Class: 4.3 Packing group: II
Proper shipping name: Barium
Reportable Quantity (RQ): 1000 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 1400 Class: 4.3 Packing group: II EMS-No: F-G, S-O
Proper shipping name: BARIUM

**IATA**
UN number: 1400 Class: 4.3 Packing group: II
Proper shipping name: Barium

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Barium | 7440-39-3 | 2007-07-01 |

**SARA 311/312 Hazards**
Reactivity Hazard, Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Barium | 7440-39-3 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Barium | 7440-39-3 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|

| | | |
|---|---|---|
| Barium | 7440-39-3 | 2007-07-01 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Eye Irrit. | Eye irritation |
| H261 | In contact with water releases flammable gases. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| Skin Irrit. | Skin irritation |
| STOT SE | Specific target organ toxicity - single exposure |
| Water-react. | Substances and mixtures, which in contact with water, emit flammable gases |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | |
| Flammability: | 3 |
| Physical Hazard | 1 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 1 |
| Special hazard.I: | W |

**Further information**
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**Preparation Information**
Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.5 Revision Date: 03/02/2015 Print Date: 05/24/2016

# SAFETY DATA SHEET

Benzene

## Section 1. Identification

**GHS product identifier** : Benzene

**Chemical name** : benzene

**Other means of identification** : benzene, purebenzol; cyclohexatriene; phenyl hydride; phene; coal naphtha; pyrobenzol

**Product use** : Synthetic/Analytical chemistry.

**Synonym** : benzene, purebenzol; cyclohexatriene; phenyl hydride; phene; coal naphtha; pyrobenzol

**SDS #** : 001062

**Supplier's details** : Airgas USA, LLC and its affiliates
259 North Radnor-Chester Road
Suite 100
Radnor, PA 19087-5283
1-610-687-5253

**Emergency telephone number (with hours of operation)** : 1-866-734-3438

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 2
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
GERM CELL MUTAGENICITY - Category 1B
CARCINOGENICITY - Category 1
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (bone marrow) - Category 1

**GHS label elements**

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Highly flammable liquid and vapor.
May form explosive mixtures with air.
Causes serious eye irritation.
Causes skin irritation.
May cause genetic defects.
May cause cancer.
Causes damage to organs through prolonged or repeated exposure. (bone marrow)

**Precautionary statements**

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.



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## Section 2. Hazards identification

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

**Response** : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**Storage** : Store locked up. Store in a well-ventilated place. Keep cool.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Substance

**Chemical name** : benzene

**Other means of identification** : benzene, purebenzol; cyclohexatriene; phenyl hydride; phene; coal naphtha; pyrobenzol

**CAS number/other identifiers**

**CAS number** : 71-43-2

**Product code** : 001062

| Ingredient name | % | CAS number |
|---|---|---|
| benzene | 100 | 71-43-2 |

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

## Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.



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# Section 4. First aid measures

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Causes skin irritation.

**Frostbite** : Try to warm up the frozen tissues and seek medical attention.

**Ingestion** : Harmful if swallowed. Irritating to mouth, throat and stomach.

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
irritation
redness

**Ingestion** : No specific data.

## Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**See toxicological information (Section 11)**



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## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use dry chemical, $CO_2$, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.



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# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| Ingredient name | Exposure limits |
|---|---|
| benzene | **ACGIH TLV (United States, 3/2012).**<br>**Absorbed through skin.**<br>STEL: 8 mg/m³ 15 minutes.<br>STEL: 2.5 ppm 15 minutes.<br>TWA: 1.6 mg/m³ 8 hours.<br>TWA: 0.5 ppm 8 hours.<br>**NIOSH REL (United States, 1/2013).**<br>STEL: 1 ppm 15 minutes.<br>TWA: 0.1 ppm 10 hours.<br>**OSHA PEL (United States, 6/2010).**<br>STEL: 5 ppm 15 minutes.<br>TWA: 1 ppm 8 hours.<br>**OSHA PEL 1989 (United States, 3/1989).**<br>STEL: 5 ppm 15 minutes.<br>TWA: 1 ppm 8 hours.<br>**OSHA PEL Z2 (United States, 11/2006).**<br>AMP: 50 ppm 10 minutes.<br>CEIL: 25 ppm<br>TWA: 10 ppm 8 hours. |



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## Section 8. Exposure controls/personal protection

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

**Appearance**

**Physical state** : Liquid. [Watery liquid.]

**Color** : Colorless. Yellowish.

**Molecular weight** : 78.12 g/mole

**Molecular formula** : C6-H6

**Boiling/condensation point** : 80.09°C (176.2°F)

**Melting/freezing point** : 5.49°C (41.9°F)

**Critical temperature** : 288.95°C (552.1°F)

**Odor** : Characteristic.

**Odor threshold** : Not available.



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## Section 9. Physical and chemical properties

| | | |
|---|---|---|
| **pH** | : | Not available. |
| **Flash point** | : | Closed cup: -11°C (12.2°F) |
| **Burning time** | : | Not applicable. |
| **Burning rate** | : | Not applicable. |
| **Evaporation rate** | : | 3.5 (butyl acetate = 1) |
| **Flammability (solid, gas)** | : | Not available. |
| **Lower and upper explosive (flammable) limits** | : | Lower: 1.2%<br>Upper: 7.8% |
| **Vapor pressure** | : | 10 kPa (75.006094245 mm Hg) [room temperature] |
| **Vapor density** | : | 2.7 (Air = 1) |
| **Specific Volume ($ft^3/lb$)** | : | 1.1403 |
| **Gas Density ($lb/ft^3$)** | : | 0.877 (20°C / 68 to °F) |
| **Relative density** | : | 0.88 |
| **Solubility** | : | Not available. |
| **Solubility in water** | : | 1.88 g/l |
| **Partition coefficient: n-octanol/water** | : | 2.13 |
| **Auto-ignition temperature** | : | 498°C (928.4°F) |
| **Decomposition temperature** | : | Not available. |
| **SADT** | : | Not available. |
| **Viscosity** | : | Dynamic (room temperature): 0.604 mPa·s (0.604 cP) |

## Section 10. Stability and reactivity

| | | |
|---|---|---|
| **Reactivity** | : | No specific test data related to reactivity available for this product or its ingredients. |
| **Chemical stability** | : | The product is stable. |
| **Possibility of hazardous reactions** | : | Under normal conditions of storage and use, hazardous reactions will not occur. |
| **Conditions to avoid** | : | Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas. |
| **Incompatibility with various substances** | : | Highly reactive or incompatible with the following materials: oxidizing materials. |
| **Hazardous decomposition products** | : | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| **Hazardous polymerization** | : | Under normal conditions of storage and use, hazardous polymerization will not occur. |



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# Section 11. Toxicological information

## Information on toxicological effects

### Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| benzene | LC50 Inhalation Gas.<br>LD50 Oral | Rat<br>Rat | 10000 ppm<br>930 mg/kg | 7 hours<br>- |

### Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|---|---|---|---|---|
| benzene | Eyes - Moderate irritant<br>Eyes - Severe irritant<br>Skin - Mild irritant<br>Skin - Mild irritant<br>Skin - Moderate irritant | Rabbit<br>Rabbit<br>Rat<br>Rabbit<br>Rabbit | -<br>-<br>-<br>-<br>- | 88 milligrams<br>24 hours 2 milligrams<br>8 hours 60 microliters<br>24 hours 15 milligrams<br>24 hours 20 milligrams | -<br>-<br>-<br>-<br>- |

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Classification

| Product/ingredient name | OSHA | IARC | NTP |
|---|---|---|---|
| benzene | + | 1 | Known to be a human carcinogen. |

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

| Name | Category | Route of exposure | Target organs |
|---|---|---|---|
| benzene | Category 1 | Not determined | bone marrow |

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : No known significant effects or critical hazards.



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# Section 11. Toxicological information

**Skin contact** : Causes skin irritation.

**Ingestion** : Harmful if swallowed. Irritating to mouth, throat and stomach.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:
irritation
redness

**Ingestion** : No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : Causes damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : May cause genetic defects.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## Numerical measures of toxicity

### Acute toxicity estimates

Not available.

# Section 12. Ecological information

## Toxicity

Not available.

## Persistence and degradability

Not available.

## Bioaccumulative potential



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## Section 12. Ecological information

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| benzene | 2.13 | 11 | low |

**Mobility in soil**

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**United States - RCRA Toxic hazardous waste "U" List**

| Ingredient | CAS # | Status | Reference number |
|---|---|---|---|
| Benzene (I,T) | 71-43-2 | Listed | U019 |

## Section 14. Transport information

| | DOT | TDG | Mexico | IMDG | IATA |
|---|---|---|---|---|---|
| **UN number** | UN1114 | UN1114 | UN114 | UN1114 | UN1114 |
| **UN proper shipping name** | BENZENE | BENZENE | BENZENE | BENZENE | BENZENE |
| **Transport hazard class(es)** | 3  | 3  | 3  | 3  | 3  |
| **Packing group** | II | II | II | II | II |
| **Environment** | No. | No. | No. | No. | No. |
| **Additional information** | **Reportable quantity** 10 lbs / 4.54 kg [1.3675 gal / 5.1767 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. | **Explosive Limit and Limited Quantity Index** 1 **Passenger Carrying Road or Rail Index** 5 | - | - | **Passenger and Cargo Aircraft**Quantity limitation: 5 L **Cargo Aircraft Only** Quantity limitation: 60 L **Limited Quantities - Passenger Aircraft** Quantity limitation: 1 L |



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## Section 14. Transport information

| | | | | | |
|---|---|---|---|---|---|
| | **Limited quantity**<br>Yes.<br><br>**Packaging instruction**<br>**Passenger aircraft**<br>Quantity limitation: 5 L<br><br>**Cargo aircraft**<br>Quantity limitation: 60 L<br><br>**Special provisions**<br>IB2, T4, TP1 | | | | |

**"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."**

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

**United States inventory (TSCA 8b)**: This material is listed or exempted.

**Clean Water Act (CWA) 307**: benzene

**Clean Water Act (CWA) 311**: benzene

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

**Composition/information on ingredients**



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# Section 15. Regulatory information

| Name | % | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|---|---|---|---|---|---|---|
| benzene | 100 | Yes. | No. | No. | Yes. | Yes. |

## SARA 313

| | Product name | CAS number | % |
|---|---|---|---|
| Form R - Reporting requirements | benzene | 71-43-2 | 100 |
| Supplier notification | benzene | 71-43-2 | 100 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

## State regulations

**Massachusetts** : This material is listed.

**New York** : This material is listed.

**New Jersey** : This material is listed.

**Pennsylvania** : This material is listed.

## California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

| Ingredient name | Cancer | Reproductive | No significant risk level | Maximum acceptable dosage level |
|---|---|---|---|---|
| benzene | Yes. | Yes. | 6.4 µg/day (ingestion)<br>13 µg/day (inhalation) | 24 µg/day (ingestion)<br>49 µg/day (inhalation) |

**Canada inventory** : This material is listed or exempted.

## International regulations

**International lists** : **Australia inventory (AICS)**: This material is listed or exempted.
**China inventory (IECSC)**: This material is listed or exempted.
**Japan inventory**: This material is listed or exempted.
**Korea inventory**: This material is listed or exempted.
**Malaysia Inventory (EHS Register)**: Not determined.
**New Zealand Inventory of Chemicals (NZIoC)**: This material is listed or exempted.
**Philippines inventory (PICCS)**: This material is listed or exempted.
**Taiwan inventory (CSNN)**: Not determined.

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

## Canada



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## Section 15. Regulatory information

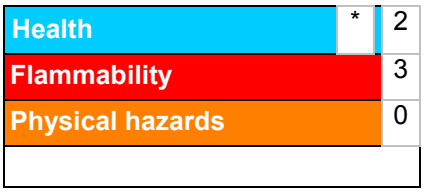
**WHMIS (Canada)** : Class B-2: Flammable liquid
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

**CEPA Toxic substances**: This material is listed.
**Canadian ARET**: This material is not listed.
**Canadian NPRI**: This material is listed.
**Alberta Designated Substances**: This material is not listed.
**Ontario Designated Substances**: This material is not listed.
**Quebec Designated Substances**: This material is not listed.

## Section 16. Other information

**Canada Label requirements** : Class B-2: Flammable liquid
Class D-2A: Material causing other toxic effects (Very toxic).
Class D-2B: Material causing other toxic effects (Toxic).

**Hazardous Material Information System (U.S.A.)**




**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.**

**The customer is responsible for determining the PPE code for this material.**

**National Fire Protection Association (U.S.A.)**

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# Section 16. Other information

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United NationsACGIH – American Conference of Governmental Industrial Hygienists
AIHA – American Industrial Hygiene Association
CAS – Chemical Abstract Services
CEPA – Canadian Environmental Protection Act
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act (EPA)
CFR – United States Code of Federal Regulations
CPR – Controlled Products Regulations
DSL – Domestic Substances List
GWP – Global Warming Potential
IARC – International Agency for Research on Cancer
ICAO – International Civil Aviation Organisation
Inh – Inhalation
LC – Lethal concentration
LD – Lethal dosage
NDSL – Non-Domestic Substances List
NIOSH – National Institute for Occupational Safety and Health
TDG – Canadian Transportation of Dangerous Goods Act and Regulations
TLV – Threshold Limit Value
TSCA – Toxic Substances Control Act
WEEL – Workplace Environmental Exposure Level
WHMIS – Canadian Workplace Hazardous Material Information System

**References** : Not available.

**Indicates information that has changed from previously issued version.**

## Notice to reader

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**
**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**



Powered by IHS

# SAFETY DATA SHEET

Based on Directive 2001/58/EC et seq. of the Commission of the European Communities

# BENZ[a]ANTHRACENE

## 1. Identification of the substance/preparation and of the company/undertaking

**1.1 Identification of the substance or preparation:**

**Synonyms:** benzo(a)anthracene

| | | | |
|---|---|---|---|
| **CAS No.** | : 56-55-3 | **BCR number** | : BCR-271 |
| **EC index No.** | : 601-033-00-9 | **NFPA code** | : N.D. |
| **EINECS No.** | : 200-280-6 | **Molecular weight** | : 228.30 |
| **RTECS No.** | : CV9275000 | **Formula** | : C18H12 |

**1.2 Use of the substance or the preparation:**
Certified reference material for laboratory use only

**1.3 Company/undertaking identification:**
Institute for Reference Materials and Measurements
Retieseweg
B-2440 Geel
Tel. : +32 14 57 12 11
Fax : +32 14 58 42 73

**1.4 Telephone number for emergency:**
+32 70 245 245
Antigifcentrum
p/a Militair Hospitaal Koningin Astrid, Bruynstraat, B-1120 Brussel

## 2. Composition/information on ingredients

| Hazardous ingredients | CAS No.<br>EINECS No. | Conc. in % | Hazard symbol | Risks (R-phrases) |
|---|---|---|---|---|
| Benzo[a]anthracene | 56-55-3<br>200-280-6 | 100 | T;N | 45-50/53 (1) |

(1) For R-phrases in full: see heading 16

## 3. Hazards identification

- May cause cancer
- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

## 4. First aid measures

**4.1 Eye contact:**
- Consult a doctor/medical service if irritation persists
- Rinse immediately with water

**4.2 Skin contact:**
- Consult a doctor/medical service if irritation persists
- Wash with water and soap
- Remove clothing before washing

**4.3 After inhalation:**
- Consult a doctor/medical service if breathing problems develop
- Remove the victim into fresh air
- Unconscious: maintain adequate airway and respiration

**4.4 After ingestion:**
- Consult a doctor/medical service if you feel unwell
- Immediately give lots of water to drink
- Never give water to an unconscious person

## 5. Fire-fighting measures

**5.1 Suitable extinguishing media:**
- Water spray
- Alcohol foam
- Polymer foam
- ABC powder
- Carbon dioxide

**5.2 Unsuitable extinguishing media:**
- Solid water jet ineffective as extinguishing medium

**5.3 Special exposure hazards:**
- Not easily combustible
- Upon combustion CO and CO2 are formed

**5.4 Instructions:**
- Take account of toxic firefighting water
- Use firefighting water moderately and contain it

**5.5 Special protective equipment for firefighters:**
- Heat/fire exposure: compressed air/oxygen apparatus
- Dust cloud production: compressed air/oxygen apparatus

## 6. Accidental release measures

**6.1 Personal protection/precautions:** see heading 8.1/8.3/10.3

**6.2 Environmental precautions:**
- Prevent soil and water pollution
- Substance must not be discharged into the sewer
- Dam up the solid spill

**6.3 Methods for cleaning up:**
- Stop dust cloud by covering with sand/earth
- Carefully collect the spill/leftovers
- Scoop solid spill into closing containers
- Take collected spill to manufacturer/competent authority
- Clean contaminated surfaces with an excess of water
- Wash clothing and equipment after handling

## 7. Handling and storage

**7.1 Handling:**
- Observe strict hygiene
- Avoid prolonged and repeated contact with skin
- Avoid raising dust
- Do not discharge the waste into the drain
- Remove contaminated clothing immediately

**7.2 Storage:**
- Keep container tightly closed. Store in a cool area. Store in a dry area.
- Store in a dark area.
- Keep away from: heat sources, ignition sources, oxidizing agents, acids

**Storage temperature** : N.D. **°C**
**Quantity limits** : N.D. **kg**
**Storage life** : N.D.
**Materials for packaging** :
- suitable : no data available

- to avoid : no data available

**7.3 Specific uses:**
See information supplied by the manufacturer

## 8. Exposure controls/Personal protection

**8.1 Exposure limit values:**

| | | | | |
|---|---|---|---|---|
| **TLV-TWA** | : | **mg/m³** | - | **ppm** |
| **TLV-STEL** | : | **mg/m³** | - | **ppm** |
| **TLV-Ceiling** | : | **mg/m³** | | **ppm** |
| **OES-LTEL** | : | **mg/m³** | | **ppm** |
| **OES-STEL** | : | **mg/m³** | | **ppm** |
| **MAK** | : | **mg/m³** | | **ppm** |
| **TRK** | : | **mg/m³** | | **ppm** |
| **MAC-TGG 8 h** | : | **mg/m³** | | |
| **MAC-TGG 15 min.** | : | **mg/m³** | | |
| **MAC-Ceiling** | : | **mg/m³** | | |
| **VME-8 h** | : | **mg/m³** | | **ppm** |
| **VLE-15 min.** | : | **mg/m³** | | **ppm** |
| **GWBB-8 h** | : | **mg/m³** | | **ppm** |
| **GWK-15 min.** | : | **mg/m³** | | **ppm** |
| **Momentary value** | : | **mg/m³** | | **ppm** |
| **EC** | : | **mg/m³** | | **ppm** |
| **EC-STEL** | : | **mg/m³** | | **ppm** |

**Sampling methods:**

| | | |
|---|---|---|
| - | Benz(a)Anthracene (Polynuclear aromatic hydrocarbons) | NIOSH 5506 |
| - | Benz(a)Anthracene (Polynuclear aromatic hydrocarbons) | NIOSH 5515 |
| - | Benz(a)Anthracene | OSHA CSI |

**8.2 Exposure controls:**

**8.2.1 Occupational exposure controls:**
- Measure the concentration in the air regularly
- Work under local exhaust/ventilation

**8.2.2 Environmental exposure controls:** see heading 13

**8.3 Personal protection:**

**8.3.1 respiratory protection:**
- Dust production: dust mask with filter type P3
- High dust production: compressed air/oxygen apparatus

**8.3.2 hand protection:**
- Gloves
  Suitable materials: No data available

- Breakthrough time: N.D.

**8.3.3 eye protection:**
- Safety glasses
- In case of dust production: protective goggles

**8.3.4 skin protection:**
- Protective clothing
- In case of dust production: head/neck protection
  Suitable materials: No data available

## 9. Physical and chemical properties

### 9.1 General information:

| | | |
|---|---|---|
| Appearance (at 20°C) | : | Crystalline solid / Scales |
| Odour | : | Odourless |
| Colour | : | Colourless to fluorescent yellow-green |

### 9.2 Important health, safety and environmental information:

| | | | |
|---|---|---|---|
| pH value | : | N.D. | |
| Boiling point/boiling range | : | N.A. | **°C** |
| Flashpoint | : | N.D. | **°C** |
| Explosion limits | : | N.D. | **vol%** ( **°C**) |
| Vapour pressure (at 20°C) | : | 0.00007 | **hPa** |
| Vapour pressure (at 50°C) | : | N.D. | **hPa** |
| Relative density (at 20°C) | : | 1.3 | |
| Water solubility | : | 0.00001 | **g/100 ml** |
| Soluble in | : | Ether, acetone, oils/fats | |
| Relative vapour density | : | N.D. | |
| Viscosity | : | N.D. | **Pa.s** |
| Partition coëfficient n-octanol/water | : | 5.61/5.79 | |
| Evaporation rate | | | |
| ratio to butyl acetate | : | N.D. | |
| ratio to ether | : | N.D. | |

### 9.3 Other information:

| | | | |
|---|---|---|---|
| Melting point/melting range | : | 160 | **°C** |
| Auto-ignition point | : | N.D. | **°C** |
| Saturation concentration | : | N.D. | **g/m$^3$** |

## 10. Stability and reactivity

**10.1 Conditions to avoid/reactivity:**
- Stable under normal conditions

**10.2 Materials to avoid:**
- Keep away from: heat sources, ignition sources, oxidizing agents, acids

**10.3 Hazardous decomposition products:**
- Upon combustion CO and CO2 are formed
- Reacts violently with (strong) oxidizers
- Decomposes on exposure to (strong) acids

## 11. Toxicological information

### 11.1 Acute toxicity:

| | | | |
|---|---|---|---|
| **LD50 oral rat** | : | N.D. | **mg/kg** |
| **LD50 dermal rat** | : | N.D. | **mg/kg** |
| **LD50 dermal rabbit** | : | N.D. | **mg/kg** |
| **LC50 inhalation rat** | : | N.D. | **mg/l/4 h** |
| **LC50 inhalation rat** | : | N.D. | **ppm/4 h** |

**11.2 Chronic toxicity:**

| | | |
|---|---|---|
| **EC carc. cat.** | : | 2 |
| **EC muta. cat.** | : | not listed |
| **EC repr. cat.** | : | not listed |
| **Carcinogenicity (TLV)** | : | A2 |
| **Carcinogenicity (MAC)** | : | K |
| **Carcinogenicity (VME)** | : | not listed |
| **Carcinogenicity (GWBB)** | : | not listed |
| **Carcinogenicity (MAK)** | : | 2 |
| **Mutagenicity (MAK)** | : | not listed |
| **Teratogenicity (MAK)** | : | - |
| **IARC classification** | : | 2A |

**11.3 Routes of exposure:** ingestion, inhalation, eyes and skin
Caution! Substance is absorbed through the skin

**11.4 Acute effects/symptoms:**

**AFTER SKIN CONTACT**
- Slight irritation

**11.5 Chronic effects:**

- Probably human carcinogenic
- Mutagenicity: AMES test positive
- Probably human mutagenic

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:
- No specific information available

SIMILAR PRODUCTS CAUSE FOLLOWING SYMPTOMS:
- Feeling of weakness
- Photoallergy
- Skin rash/inflammation
- Cracking of the skin
- Skin cancer
- Lung tissue affection/degeneration
- Enlargement/affection of the liver
- Affection of the renal tissue

## 12. Ecological information

**12.1 Ecotoxicity:**

- LC50 (65 h) : 0.0018 mg/l (PIMEPHALES PROMELAS)
- EC50 (96 h) : 0.01 mg/l (DAPHNIA PULEX)

**12.2 Mobility:**

- **Volatile organic compounds (VOC):** 0%

- Photolysis in water
- Ozonation in water
- Insoluble in water

For other physicochemical properties see heading 9.

**12.3 Persistence and degradability:**

- **biodegradation $BOD_5$** : N.D. **% ThOD**
- **water** : - Not readily biodegradable in water
- **soil** : **T ½:** > 100 **days**

**12.4 Bioaccumulative potential:**
- **log $P_{ow}$** : 5.61/5.79
- **BCF** : 72 h : 350 (LEUCISCUS IDUS)
- Highly bioaccumulative

**12.5 Other adverse effects:**

- **WGK** : 3 (Classification based on the R-phrases in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 17 May 1999)
- **Effect on the ozone layer** : Not dangerous for the ozone layer (Council Regulation (EC) 3093/94)
- **Greenhouse effect** : no data available
- **Effect on waste water purification** : no data available

## 13. Disposal considerations

**13.1 Provisions relating to waste:**

- Waste material code (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 16 05 06 (laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals)
- Waste material code (Flanders): 001, 045, 691
- Waste code (Germany): 59302
- Hazardous waste (91/689/EEC)

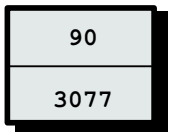
**13.2 Disposal methods:**

- Dissolve or mix with a combustible solvent
- Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber
- Do not discharge into surface water (2000/60/EEC, Council Decision 2455/2001/EC)

**13.3 Packaging/Container:**

- Waste material code packaging (91/689/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 15 01 10 (packaging containing residues of or contaminated by dangerous substances)

## 14. Transport information




**14.1 Classification of the substance in compliance with UN Recommendations**

| | |
|---|---|
| **UN number** | : 3077 |
| **CLASS** | : 9 |
| **SUB RISKS** | : - |
| **PACKING** | : III |
| **PROPER SHIPPING NAME** | : UN 3077, Environmentally hazardous substance, solid, n.o.s. (benzo[a]anthracene) |

**14.2 ADR (transport by road)**

| | |
|---|---|
| **CLASS** | : 9 |
| **PACKING** | : III |
| **DANGER LABEL TANKS** | : 9 |
| **DANGER LABEL PACKAGES** | : 9 |

**14.3 RID (transport by rail)**

| | |
|---|---|
| **CLASS** | : 9 |
| **PACKING** | : III |
| **DANGER LABEL TANKS** | : 9 |
| **DANGER LABEL PACKAGES** | : 9 |

**14.4 ADNR (transport by inland waterways)**

| | |
|---|---|
| **CLASS** | : 9 |
| **PACKING** | : III |
| **DANGER LABEL TANKS** | : 9 |
| **DANGER LABEL PACKAGES** | : 9 |

**14.5 IMDG (maritime transport)**

| | |
|---|---|
| **CLASS** | : 9 |
| **SUB RISKS** | : - |
| **PACKING** | : III |
| **MFAG** | : - |
| **EMS** | : - |
| **MARINE POLLUTANT** | : P |

**14.6 ICAO (air transport)**

| | |
|---|---|
| **CLASS** | : 9 |
| **SUB RISKS** | : - |
| **PACKING** | : III |
| **PACKING INSTRUCTIONS PASSENGER AIRCRAFT** | : |
| **PACKING INSTRUCTIONS CARGO AIRCRAFT** | : |

**14.7 Special precautions in connection with transport** : none

**14.8 Limited quantities (LQ)** :

When substances and their packaging meet the conditions established by ADR/RID/ADNR in chapter 3.4, **only** the following prescriptions shall be complied with:
each package shall display a diamond-shaped figure with the following inscription:
- 'UN 3077'
or, in the case of different goods with different identification numbers within a single package:
- the letters 'LQ'

## 15. Regulatory information

Enumerated in substance list Annex I of directive 67/548/EEC et sequens



Toxic



Dangerous for the environment

R45 : May cause cancer
R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S53 : Avoid exposure - obtain special instructions before use
S45 : In case of accident or if you feel unwell, seek medical advice (show the label where possible)
S60 : This material and/or its container must be disposed of as hazardous waste
S61 : Avoid release to the environment. Refer to special instructions/safety data sheets.

## 16. Other information

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**N.A.** = NOT APPLICABLE
**N.D.** = NOT DETERMINED
***** = INTERNAL CLASSIFICATION

**Full text of any R-phrases referred to under heading 2:**

R45 : May cause cancer
R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**Exposure limits:**
**TLV** : Threshold Limit Value - ACGIH USA 2000
**OES** : Occupational Exposure Standards - United Kingdom 1999
**MEL** : Maximum Exposure Limits - United Kingdom 1999
**MAK** : Maximale Arbeitsplatzkonzentrationen - Germany 2001
**TRK** : Technische Richtkonzentrationen - Germany 2001
**MAC** : Maximale aanvaarde concentratie - The Netherlands 2002
**VME** : Valeurs limites de Moyenne d'Exposition - France 1999
**VLE** : Valeurs limites d'Exposition à court terme - France 1999
**GWBB** : Grenswaarde beroepsmatige blootstelling - Belgium 1998
**GWK** : Grenswaarde kortstondige blootstelling - Belgium 1998
**EC** : Indicative occupational exposure limit values - directive 2000/39/EC

**Chronic toxicity:**
**K** : List of the carcinogenic substances and processes - The Netherlands 2002

# Safety Data Sheet

**Revision Date: 03/23/15**
www.restek.com

## 1. IDENTIFICATION

| | |
|---|---|
| **Catalog Number / Product Name:** | **31272, 31272-5XX, & 31372 / Benzo (b) Fluoranthene Standard** |
| **Company:** | Restek Corporation |
| **Address:** | 110 Benner Circle<br>Bellefonte, Pa. 16823 |
| **Phone#:** | 814-353-1300 |
| **Fax#:** | 814-353-1309 |
| **Emergency#:** | 1-800-424-9300 (CHEMTREC)<br>+1 703-741-5970 (Outside the US) |
| **Email:** | sds@restek.com |
| **Revision Number:** | 8 |
| **Intended use:** | For Laboratory use only |

## 2. HAZARD(S)IDENTIFICATION

**Emergency Overview:**

**GHS Hazard Symbols:**



**GHS Classification:**
Flammable Liquid Category 2
Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

**GHS Signal Word:**
Danger

**GHS Hazard:**
Highly flammable liquid and vapour.
May cause drowsiness or dizziness.

**GHS Precautions:**

**Safety Precautions:**
Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilation and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

**First Aid Measures:**
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
In case of fire: Use extinguishing media in section 5 for extinction.

**Storage:**
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.

**Disposal:**
Dispose of contents/container according to section 13 of the SDS.

**Single Exposure Target Organs:**
No data available.

**Repeated Exposure Target Organs:**
No data available.

## 3. COMPOSITION / INFORMATION ON INGREDIENT

| Chemical Name | CAS # | EINEC # | % Composition |
|---|---|---|---|
| Acetone | 67-64-1 | 200-662-2 | 99.900000 |
| benzo (b) fluoranthene | 205-99-2 | 205-911-9 | 0.100000 |

## 4. FIRST-AID MEASURES

**Inhalation:** Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately

**Eyes:** Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

**Skin Contact:** Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

**Ingestion:** Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this SDS.

## 5. FIRE- FIGHTING MEASURES

**Extinguishing Media:** Use alcohol resistant foam, carbon dioxide, or dry chemical extinguishing agents. Water spray or fog may also be effective for extinguishing if swept across the base of the fire. Water can also be used to absorb heat and keep exposed material from being damaged by fire. Flammable component(s) of this material may be lighter than water and burn while floating on the surface.

**Fire and/or Explosion Hazards:** Vapors may be ignited by heat, sparks, flames or other sources of ignition at or above the low flash point giving rise to a Class B fire. Vapors are heavier than air and may travel to a source of ignition and flash back

**Fire Fighting Methods and Protection:** Do not enter fire area without proper protection including self-contained toxic breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products. Flammable component(s) of this material may be lighter than water and burn while floating on the surface. Use water spray/fog for cooling.

**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions and Equipment:** Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.

**Methods for Clean-up:** Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

## 7. HANDLING AND STORAGE

**Handling Technical Measures and Precautions:** Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Use spark-proof tools and explosion-proof equipment

**Storage Technical Measures and Conditions:** Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Keep away from sources of ignition

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**United States:**

| Chemical Name | CAS No. | IDLH | ACGIH STEL | ACGIH TLV-TWA | OSHA Exposure Limit |
|---|---|---|---|---|---|
| Acetone | 67-64-1 | 2500 ppm IDLH (10% LEL) | 750 ppm STEL 750 ppm STEL; | 500 ppm TWA 500 ppm TWA; 1188 mg/m3 | 1000 ppm TWA; 2400 mg/m3 TWA |

| | | | | | |
|---|---|---|---|---|---|
| benzo (b) fluoranthene | 205-99-2 | ND | 1782 mg/m3 STEL TWA<br>No TLV | | No data available. |

**Personal Protection:**

| | |
|---|---|
| **Engineering Measures:** | Local exhaust ventilation is recommended when generating excessive levels of vapors from handling or thermal processing. |
| **Respiratory Protection:** | No respiratory protection required under normal conditions of use. Provide general room exhaust ventilation if symptoms of overexposure occur as explained Section 3. A respirator is not normally required. |
| **Eye Protection:** | Wear chemically resistant safety glasses with side shields when handling this product. Do not wear contact lenses. |
| **Skin Protection:** | Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work |
| **Medical Conditions Aggravated By Exposure:** | Respiratory disease including asthma and bronchitis |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance, color:** | Depends upon product selection |
| **Odor:** | Strong |
| **Physical State:** | No data available. |
| **pH:** | No data available |
| **Vapor Density:** | 2.0 (air = 1) |
| **Melting Point:** | -95.4 °C Melting Point |
| **Flash Point:** | 39 |
| **Flammability:** | Highly Flammable |
| **Upper Flammable/Explosive Limit, % in air:** | No data available. |
| **Lower Flammable/Explosive Limit, % in air:** | No data available. |
| **Autoignition Temperature:** | 465 deg C |
| **Decomposition Temperature:** | No data available. |
| **Specific Gravity:** | 0.7845 g/cm3 at 25 °C |
| **Evaporation Rate:** | No data available. |
| **Odor Threshold:** | ND |
| **Solubility:** | Complete; 100% |
| **Partition Coefficient: n-octanol in water:** | No data available. |
| **VOC % by weight:** | 0.00 |
| **Molecular Weight:** | 58.08 |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Stability:** | Stable under normal conditions. |
| **Conditions to Avoid:** | No data available. |
| **Materials to Avoid / Chemical Incompatiability:** | Strong oxidizing agents Strong acids |
| **Hazardous Decomposition Products:** | Carbon dioxide Carbon monoxide |

## 11. TOXICOLOGICAL INFORMATION

| | |
|---|---|
| **Routes of Entry:** | Inhalation, Skin Contact, Eye Contact, Ingestion |
| **Target Organs Potentially Affected By Exposure:** | Eyes, Central nervous system stimulation, Respiratory Tract, Skin |
| **Chemical Interactions That Change Toxicity:** | None Known |

**Immediate (Acute) Health Effects by Route of Exposure:**

| | |
|---|---|
| **Inhalation Irritation:** | Can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea, and headache. |
| **Skin Contact:** | Can cause minor skin irritation, defatting, and dermatitis. |
| **Eye Contact:** | Can cause minor irritation, tearing and reddening. |
| **Ingestion Irritation:** | May be harmful if swallowed. |
| **Ingestion Toxicity:** | Harmful if swallowed. May cause systemic poisoning. |

**Long-Term (Chronic) Health Effects:**

| | |
|---|---|
| **Carcinogenicity:** | Contains a probable or known human carcinogen. |
| **Reproductive and Developmental Toxicity:** | No data available to indicate product or any components present at greater than 0.1% may cause birth defects. |
| **Inhalation:** | Upon prolonged and/or repeated exposure, can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea, and headache. |
| **Skin Contact:** | Upon prolonged or repeated contact, can cause minor |

skin irritation, defatting, and dermatitis.

**Component Toxicological Data:**

**NIOSH:**

| Chemical Name | CAS No. | LD50/LC50 |
|---|---|---|
| Acetone | 67-64-1 | Inhalation LC50 Rat 50100 mg/m3 8 h |

**Component Carcinogenic Data:**

**OSHA:**

| Chemical Name | CAS No. | |
|---|---|---|
| Benzo(b)fluoranthene | 205-99-2 | Present |

**ACGIH:**

| Chemical Name | CAS No. | |
|---|---|---|
| Acetone | 67-64-1 | A4 - Not Classifiable as a Human Carcinogen |
| Benzo[b]fluoranthene | 205-99-2 | A2 - Suspected Human Carcinogen |

**NIOSH:**

| Chemical Name | CAS No. |
|---|---|
| No data available. | |

**NTP:**

| Chemical Name | CAS No. |
|---|---|
| No data available. | |

**IARC:**

| Chemical Name | CAS No. | Group No. |
|---|---|---|
| No data. | | Group 1 |
| No data. | | Group 2A |
| Benzo(b)fluoranthene | 205-99-2 | Group 2B |

## 12. ECOLOGICAL INFORMATION

**Overview:** This material is not expected to be harmful to the ecology.
**Mobility:** No data
**Persistence:** No data
**Bioaccumulation:** No data
**Degradability:** No data
**Ecological Toxicity Data:** No data available.

## 13. DISPOSAL CONSIDERATIONS

**Waste Description of Spent Product:** Spent or discarded material is a hazardous waste.
**Disposal Methods:** Dispose of by incineration following Federal, State, Local, or Provincial regulations.
**Waste Disposal of Packaging:** Comply with all Local, State, Federal, and Provincial Environmental Regulations.

## 14. TRANSPORTATION INFORMATION

**United States:**
**DOT Proper Shipping Name:** Acetone
**UN Number:** UN1090
**Hazard Class:** 3
**Packing Group:** II

**International:**
**IATA Proper Shipping Name:** Acetone
**UN Number:** UN1090
**Hazard Class:** 3
**Packing Group:** II

**Marine Pollutant:** No

| Chemical Name | CAS# | Marine Pollutant | Severe Marine Pollutant |
|---|---|---|---|
| No data available. | | | |

## 15. REGULATORY INFORMATION

**United States:**

| Chemical Name | CAS# | CERCLA | SARA 313 | SARA EHS 313 | TSCA |
|---|---|---|---|---|---|
| Acetone | 67-64-1 | X | - | - | X |
| benzo (b) fluoranthene | 205-99-2 | X | X | - | - |

**The following chemicals are listed on CA Prop 65:**

| Chemical Name | CAS # | Regulation |
|---|---|---|
| Benzo[b]fluoranthene | 205-99-2 | Prop 65 Cancer |

**State Right To Know Listing:**

| Chemical Name | CAS# | New Jersey | Massachusetts | Pennsylvania | California |
|---|---|---|---|---|---|
| Acetone | 67-64-1 | X | X | X | X |
| benzo (b) fluoranthene | 205-99-2 | X | X | X | X |

## 16. OTHER INFORMATION

**Prior Version Date:** 05/16/14

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# SAFETY DATA SHEET

**Revision Date** 10-Feb-2015 **Revision Number** 1

## 1. Identification

**Product Name** **Benzo[ghi]perylene**

**Cat No. :** **AC105550000; AC105550050; AC105550250; AC105551000**

**Synonyms** 1,12-Benzoperylene

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Entity / Business Name**
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number**
For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**
Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Label Elements**
None required

**Hazards not otherwise classified (HNOC)**
Very toxic to aquatic life with long lasting effects

## 3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Benzo(ghi)perylene | 191-24-2 | > 98 |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

**Inhalation** Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.

**Ingestion** Clean mouth with water. Get medical attention.

**Most important symptoms/effects** No information available.
**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available
**Method -** No information available

**Autoignition Temperature** No information available
**Explosion Limits**
**Upper** No data available
**Lower** No data available
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**
Carbon monoxide (CO) Carbon dioxide ($CO_2$)
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 0 | 0 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment.
**Environmental Precautions** See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean Up** Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

## 7. Handling and storage

**Handling** Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist.

**Storage** Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

## 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

| | |
|---|---|
| **Eye/face Protection** | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. |
| **Skin and body protection** | Wear appropriate protective gloves and clothing to prevent skin exposure. |
| **Respiratory Protection** | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |
| **Hygiene Measures** | Handle in accordance with good industrial hygiene and safety practice. |

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Solid |
| **Appearance** | Yellow |
| **Odor** | Odorless |
| **Odor Threshold** | No information available |
| **pH** | No information available |
| **Melting Point/Range** | 276 - 280 °C / 528.8 - 536 °F |
| **Boiling Point/Range** | No information available > @ 760 mmHg |
| **Flash Point** | No information available |
| **Evaporation Rate** | No information available |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | No information available |
| **Vapor Density** | No information available |
| **Relative Density** | No information available |
| **Solubility** | No information available |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | No information available |
| **Decomposition Temperature** | No information available |
| **Viscosity** | No information available |
| **Molecular Formula** | C22 H12 |
| **Molecular Weight** | 276.33 |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactive Hazard** | None known, based on information available |
| **Stability** | Stable. |
| **Conditions to Avoid** | Excess heat. Exposure to light. Incompatible products. |
| **Incompatible Materials** | Strong oxidizing agents |
| **Hazardous Decomposition Products** | Carbon monoxide (CO), Carbon dioxide ($CO_2$) |
| **Hazardous Polymerization** | Hazardous polymerization does not occur. |
| **Hazardous Reactions** | None under normal processing. |

## 11. Toxicological information

**Acute Toxicity**

| | |
|---|---|
| **Product Information** | No acute toxicity information is available for this product |
| **Component Information** | |
| **Toxicologically Synergistic** | No information available |

**Products**

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Benzo(ghi)perylene | 191-24-2 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known
**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

## 12. Ecological information

**Ecotoxicity**

Do not empty into drains.

**Persistence and Degradability** No information available
**Bioaccumulation/ Accumulation** No information available.

**Mobility** .

| Component | log Pow |
|---|---|
| Benzo(ghi)perylene | 7.23 |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT** Not regulated
**TDG** Not regulated
**IATA** Not regulated
**IMDG/IMO** Not regulated

## 15. Regulatory information

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzo(ghi)perylene | - | - | - | 205-883-8 | - | | - | - | - | - | - |

**Legend:**
**X - Listed**
**E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.**
**F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.**
**N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.**
**P - Indicates a commenced PMN substance**
**R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.**
**S - Indicates a substance that is identified in a proposed or final Significant New Use Rule**
**T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.**
**XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).**
**Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.**
**Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.**

## U.S. Federal Regulations

**TSCA 12(b)** Not applicable

**SARA 313**

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---|---|---|---|
| Benzo(ghi)perylene | 191-24-2 | > 98 | 1.0 |

**SARA 311/312 Hazardous Categorization**

| | |
|---|---|
| **Acute Health Hazard** | No |
| **Chronic Health Hazard** | No |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**Clean Water Act**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Benzo(ghi)perylene | - | - | X | X |

**Clean Air Act** Not applicable

**OSHA** Occupational Safety and Health Administration
Not applicable

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Benzo(ghi)perylene | 5000 lb | - |

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Benzo(ghi)perylene | X | X | X | X | - |

**U.S. Department of Transportation**

| | |
|---|---|
| Reportable Quantity (RQ): | N |
| DOT Marine Pollutant | N |
| DOT Severe Marine Pollutant | N |

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Canada**
**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

**WHMIS Hazard Class** Non-controlled

## 16. Other information

**Prepared By**
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Revision Date** 10-Feb-2015
**Print Date** 10-Feb-2015
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Disclaimer**
**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of SDS**

Institute for Reference Materials and Measurements

# SAFETY DATA SHEET

Based on Regulation (EC) No. 1907/2006 (REACH) Article 31 and Annex II

# BCR-048R: benzo[k]fluoranthene

## 1. Identification of the substance/preparation and of the company/undertaking

### 1.1 Identification of the substance or preparation:

Product name: BCR-048R: benzo[k]fluoranthene

| | |
|---|---|
| CAS number | 207-08-9 |
| EC index number | 601-036-00-5 |
| EINECS number | 205-916-6 |
| RTECS number | DF6350000 |
| Molecular mass | 252.32 g/mol |
| Formula | C20H12 |

### 1.2 Use of the substance/preparation:

Certified reference material for laboratory use only

### 1.3 Company/undertaking identification:

Institute for Reference Materials and Measurements
Retieseweg
B-2440 Geel
Tel: +32 14 57 12 11
Fax: +32 14 59 04 06
JRC-IRMM-RM-Sales@ec.europa.eu

### 1.4 Emergency telephone:

Poison Centre: +32 70 245 245

## 2. Hazards identification

NFPA: 1-1-2(*)

### DSD/DPD

May cause cancer

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**Other hazards**

Its dust is explosive with air

Dust cloud can be ignited by a spark

Slightly irritant to skin

Slightly irritant to eyes

Caution! Substance is absorbed through the skin

No certainty about human mutagenic properties

Highly bioaccumulative

Not readily biodegradable in water

### CLP

| | |
|---|---|
| Carc. 1B | May cause cancer. (H350) |
| Aquatic Acute 1 | Very toxic to aquatic life. (H400) |
| Aquatic Chronic 1 | Very toxic to aquatic life with long lasting effects. (H410) |

**Other hazards**

Its dust is explosive with air

Dust cloud can be ignited by a spark

Slightly irritant to skin

Slightly irritant to eyes

Caution! Substance is absorbed through the skin

No certainty about human mutagenic properties

Highly bioaccumulative

Not readily biodegradable in water

## 3. Composition/information on ingredients

| Name | CAS No EINECS/ELINCS | Conc. | Classification according to DSD/DPD | Classification according to CLP | Note |
|---|---|---|---|---|---|
| benzo[k]fluoranthene | 207-08-9<br>205-916-6 | | Carc. Cat. 2; R45<br>N; R50-53 | Carc. 1B; H350<br>Aquatic Acute 1; H400<br>Aquatic Chronic 1; H410 | |

## 4. First aid measures

### 4.1 After inhalation:

Remove the victim into fresh air

Respiratory problems: consult a doctor/medical service

### 4.2 Skin contact:

Rinse with water

Do not apply (chemical) neutralizing agents

Take victim to a doctor if irritation persists

### 4.3 Eye contact:

Rinse with water

Do not apply neutralizing agents

Take victim to an ophthalmologist if irritation persists

### 4.4 After ingestion:

Rinse mouth with water

Immediately after ingestion: give lots of water to drink

Do not induce vomiting

Consult a doctor/medical service if you feel unwell

## 5. Fire-fighting measures

### 5.1 Suitable extinguishing media:

Water spray

Polyvalent foam

ABC powder

Carbon dioxide

### 5.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known

### 5.3 Special exposure hazards:

Heating increases the fire hazard

Dust cloud can be ignited by a spark

Upon combustion CO and CO2 are formed

### 5.4 Instructions:

Take account of toxic fire-fighting water

Use water moderately and if possible collect or contain it

### 5.5 Special protective equipment for fire-fighters:

Gloves

Protective clothing

Heat/fire exposure: compressed air/oxygen apparatus

## 6. Accidental release measures

### 6.1 Personal precautions:

See heading 8.2

### 6.2 Environmental precautions:

Dam up the solid spill

Prevent soil and water pollution

Prevent spreading in sewers

See heading 13

### 6.3 Methods for cleaning up:

Scoop solid spill into closing containers
Carefully collect the spill/leftovers
Clean contaminated surfaces with an excess of water
Take collected spill to manufacturer/competent authority
Wash clothing and equipment after handling

## 7. Handling and storage

### 7.1 Handling:

Avoid raising dust
Warning! Avoid exposure
Keep away from naked flames/heat
Obtain special instructions before use
Observe strict hygiene
Keep container tightly closed
Do not discharge the waste into the drain

### 7.2 Storage:

**Safe storage requirements:**

Store in a cool area
Store in a dry area
Keep container in a well-ventilated place
Keep locked up
Unauthorized persons are not admitted
Meet the legal requirements

**Keep away from:**

oxidizing agents
(strong) acids

### 7.3 Specific use(s):

See information supplied by the manufacturer for the identified use(s)

## 8. Exposure controls/Personal protection

### 8.1 Exposure limit values:

8.1.1 Occupational exposure:

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods:

| Product name | Test | Number | Sampling method | Remarks |
|---|---|---|---|---|
| Benz(a)Anthracene | OSHA | CSI | | |
| Benz(a)Anthracene (Polynuclear aromatic hydrocarbons) | NIOSH | 5506 | adsorption tubes | |
| Benz(a)Anthracene (Polynuclear aromatic hydrocarbons) | NIOSH | 5515 | adsorption tubes | |

### 8.2 Exposure controls:

8.2.1 Occupational exposure controls:

Measure the concentration in the air regularly
Carry operations in the open/under local exhaust/ventilation or with respiratory protection
Personal protective equipment:

a) Respiratory protection:

Dust production: dust mask with filter type P3

b) Hand protection:

Gloves

c) Eye protection:

Safety glasses
In case of dust production: protective goggles

d) Skin protection:

Protective clothing

8.2.2 Environmental exposure controls:

See headings 6.2, 6.3 and 13

## 9. Physical and chemical properties

### 9.1 General information:

| | |
|---|---|
| Physical form | Crystalline solid |
| | Needles |
| Colour | Light yellow |

### 9.2 Important health, safety and environmental information:

| | |
|---|---|
| Boiling point | 480 °C |
| Vapour pressure (20°C) | < 0.00001 hPa |
| Solubility in water | < 0.00001 g/100 ml |
| Solubility in solvents | Soluble in ethanol |
| | Soluble in acetic acid |
| | Soluble in oils/fats |
| Log Pow | 6.84 |

### 9.3 Other information:

| | |
|---|---|
| Melting point | 217 °C |

## 10. Stability and reactivity

### 10.1 Conditions to avoid:

**Possible fire hazard**

heat sources

ignition sources

**Stability**

No data available

**Reactions**

Reacts violently with (strong) oxidizers

### 10.2 Materials to avoid:

oxidizing agents

(strong) acids

### 10.3 Hazardous decomposition products:

Upon combustion CO and CO2 are formed

## 11. Toxicological information

### 11.1 Acute toxicity:

No (test)data available.

### 11.2 Chronic toxicity:

Probably human carcinogenic

No certainty about human mutagenic properties

Not classified as toxic to reproduction (EC)

BCR-048R: benzo[k]fluoranthene

| | |
|---|---|
| EC carc cat | 2 |
| Listed in SZW - List of carcinogenic substances | yes |
| IARC - classification | 2B |
| MAK - Krebserzeugend Kategorie | 2 |
| MAK - Keimzellmutagen Kategorie | 3B |
| MAK - Schwangerschaft Gruppe | - |
| CLP carc cat | category 1B |

### 11.3 Acute effects/symptoms:

**Inhalation:**

No data available

**Skin contact:**

Slight irritation

**Eye contact:**

Slight irritation

**Ingestion:**

No data available

### 11.4 Chronic effects:

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:
No specific information available
SIMILAR PRODUCTS CAUSE FOLLOWING SYMPTOMS:
Feeling of weakness
Cracking of the skin
Skin rash/inflammation
Photoallergy
Skin cancer
Lung tissue affection/degeneration
Enlargement/affection of the liver
Affection of the renal tissue

## 12. Ecological information

### 12.1 Ecotoxicity:

No (test)data available.

### 12.2 Mobility:

| | |
|---|---|
| Volatile organic compounds (VOC) | 0 % |
| Solubility in/reaction with water | Insoluble in water |
| Water physicochemical processes | Forming sediments in water |
| Soil physicochemical processes | Adsorbs into the soil |

### 12.3 Persistence and degradability:

| | |
|---|---|
| Water abiotic degradation processes | Ozonation in water |
| Half-life soil | 65 - 1400 days |

Not readily biodegradable in water

### 12.4 Bioaccumulative potential:

| | |
|---|---|
| Log Pow | 6.84 |

Highly bioaccumulative

### 12.5 Results of PBT assessment:

Not applicable, based on available data

### 12.6 Other adverse effects:

Not dangerous for the ozone layer (Council Regulation (EC) no 1005/2009)

## 13. Disposal considerations

### 13.1 Provisions relating to waste:

Waste material code (Directive 2008/98/EC, decision 2001/118/EC)
16 05 06* : laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Depending on branch of industry and production process, also other EURAL codes may be applicable
Hazardous waste according to Directive 2008/98/EC

### 13.2 Disposal methods:

Dissolve or mix with a combustible solvent
Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber with energy recovery
Remove waste in accordance with local and/or national regulations
Do not discharge into surface water (2000/60/EC, Council decision 2455/2001/EC, O.J. L331 of 15/12/2001)

### 13.3 Packaging/Container:

Waste material code packaging (Directive 2008/98/EC)
15 01 10* : packaging containing residues of or contaminated by dangerous substances

### {13.4 Entsorgung verschmutzter Gebinde:}

## 14. Transport information

**ADR**

| | |
|---|---|
| Proper shipping name | Environmentally hazardous substance, solid, n.o.s. |
| Techn./chem. name ADR | benzo[k]fluoranthene |
| UN number | 3077 |
| Class | 9 |
| Packing group | III |
| Hazard identification number | 90 |
| Classification code | M7 |
| Labels | 9 |
| Environmentally hazardous substance mark | yes |

**RID**

| | |
|---|---|
| Proper shipping name | Environmentally hazardous substance, solid, n.o.s. |
| Techn./chem. name RID | benzo[k]fluoranthene |
| UN number | 3077 |
| Class | 9 |
| Packing group | III |
| Classification code | M7 |
| Labels | 9 |
| Environmentally hazardous substance mark | yes |

**ADNR**

| | |
|---|---|
| Proper shipping name | Environmentally hazardous substance, solid, n.o.s. |
| Techn./chem. name ADNR | benzo[k]fluoranthene |
| UN number | 3077 |
| Class | 9 |
| Packing group | III |
| Classification code | M7 |
| Labels | 9 |
| Environmentally hazardous substance mark | yes |

**IMO**

| | |
|---|---|
| Proper shipping name | Environmentally hazardous substance, solid, n.o.s. |
| Techn./chem. name IMO | benzo[k]fluoranthene |
| UN number | 3077 |
| Class | 9 |
| Packing group | III |
| Labels | 9 |
| Marine pollutant | P |
| Environmentally hazardous substance mark | yes |

**ICAO**

| | |
|---|---|
| Proper shipping name | Environmentally hazardous substance, solid, n.o.s. |
| Techn./chem. name ICAO | benzo[k]fluoranthene |
| UN number | 3077 |
| Class | 9 |
| Packing group | III |
| Labels | 9 |
| Environmentally hazardous substance mark | yes |

## 15. Regulatory information

**15.1 EU Legislation:**

### DSD/DPD

Enumerated in substance list Annex I of directive 67/548/EEC et sequens





Dangerous for the environment

#### R-phrases

| | |
|---|---|
| 45 | May cause cancer |
| 50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |

#### S-phrases

| | |
|---|---|
| 53 | Avoid exposure - obtain special instructions before use |
| 45 | In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) |
| 60 | This material and its container must be disposed of as hazardous waste |
| 61 | Avoid release to the environment. Refer to special instructions/safety data sheets. |

#### Additional recommendations

| | |
|---|---|
| | Restricted to professional users. |

### CLP

Classification and labelling according to Regulation (EC) No 1272/2008 – Annex VI and after evaluation of available test data





#### Signal word

| | |
|---|---|
| Dgr | Danger |

#### H-statements

| | |
|---|---|
| H350 | May cause cancer. |
| H410 | Very toxic to aquatic life with long lasting effects. |

#### P-statements

| | |
|---|---|
| P202 | Do not handle until all safety precautions have been read and understood. |
| P281 | Use personal protective equipment as required. |
| P273 | Avoid release to the environment. |
| P308 + P313 | IF exposed or concerned: Get medical advice/attention. |
| P391 | Collect spillage. |
| P405 | Store locked up. |

#### Supplemental information

| | |
|---|---|
| | Restricted to professional users. |

### 15.2 National provisions:

### 15.3 Specific community rules:

Enumerated in Annex XVII of Regulation (EC) No. 1907/2006: Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

| Legislation | Reference legislation |
|---|---|
| EG/552/2009 | See column 1: 28. |
| EG/552/2009 | See column 1: 50. g) |

## 16. Other information

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question.

Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult your BIG licence agreement for details.

(*) = INTERNAL CLASSIFICATION (NFPA)

PBT-substances = persistent, bioaccumulative and toxic substances

DSD Dangerous Substance Directive
DPD Dangerous Preparation Directive
CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

Full text of any R-phrases referred to under headings 2 and 3:

| | |
|---|---|
| R45 | May cause cancer |
| R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |

Full text of any H-statements referred to under headings 2 and 3:

| | |
|---|---|
| H350 | May cause cancer. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Full text of any classes referred to under headings 2 and 3:

| | |
|---|---|
| Aquatic Acute | Hazardous to the aquatic environment - acute |
| Aquatic Chronic | Hazardous to the aquatic environment - chronic |
| Carc. | Carcinogenicity |

# SAFETY DATA SHEET

**Revision Date** 25-Mar-2024 **Revision Number** 4

## 1. Identification

**Product Name** **Benzo[a]pyrene**

**Cat No. :** **15856**

**CAS No** 50-32-8
**Synonyms** Benzo[def]chrysene.; 3,4-Benzopyrene; 3,4-Benzpyrene

**Recommended Use** Laboratory chemicals.
**Uses advised against** Food, drug, pesticide or biocidal product use.

**Details of the supplier of the safety data sheet**

**Company**
Thermo Fisher Scientific Chemicals, Inc.
30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757

**Emergency Telephone Number**
For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No. **US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Skin Sensitization | Category 1 |
| Germ Cell Mutagenicity | Category 1B |
| Carcinogenicity | Category 1A |
| Reproductive Toxicity | Category 1B |

**Label Elements**

**Signal Word**
Danger

**Hazard Statements**
May cause an allergic skin reaction
May cause genetic defects

May cause cancer
May damage fertility. May damage the unborn child



**Precautionary Statements**
**Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
**Response**
IF exposed or concerned: Get medical attention/advice
**Skin**
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
**Storage**
Store locked up
**Disposal**
Dispose of contents/container to an approved waste disposal plant
**Hazards not otherwise classified (HNOC)**
Very toxic to aquatic life with long lasting effects
WARNING. Cancer - https://www.p65warnings.ca.gov/.

## 3. Composition/Information on Ingredients

| Component | CAS No | Weight % |
|---|---|---|
| Benzo[a]pyrene | 50-32-8 | > 96 |

## 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

**Most important symptoms and effects** None reasonably foreseeable. . May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available
**Method -** No information available

**Autoignition Temperature** Not applicable
**Explosion Limits**
**Upper** No data available
**Lower** No data available
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Do not allow run-off from fire-fighting to enter drains or water courses.

**Hazardous Combustion Products**
Carbon monoxide (CO). Carbon dioxide ($CO_2$).
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 2 | 1 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**Methods for Containment and Clean Up** Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

**Handling** Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

**Storage.** Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Oxidizing agent.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

| Component | ACGIH TLV | OSHA PEL | NIOSH | Mexico OEL (TWA) |
|---|---|---|---|---|
| Benzo[a]pyrene | | TWA: 0.2 mg/m³ | | |

*Legend*

*OSHA - Occupational Safety and Health Administration*

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

| | |
|---|---|
| **Eye/face Protection** | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. |
| **Skin and body protection** | Wear appropriate protective gloves and clothing to prevent skin exposure. |
| **Respiratory Protection** | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |
| **Recommended Filter type:** | Particulates filter conforming to EN 143. |
| **Hygiene Measures** | Handle in accordance with good industrial hygiene and safety practice. |

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Powder Solid |
| **Appearance** | Dark yellow |
| **Odor** | aromatic |
| **Odor Threshold** | No information available |
| **pH** | Not applicable |
| **Melting Point/Range** | 175 - 179 °C / 347 - 354.2 °F |
| **Boiling Point/Range** | 495 °C / 923 °F @ 760 mmHg |
| **Flash Point** | No information available |
| **Evaporation Rate** | Not applicable |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | No information available |
| **Vapor Density** | Not applicable |
| **Specific Gravity** | No information available |
| **Solubility** | Insoluble in water |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | Not applicable |
| **Decomposition Temperature** | No information available |
| **Viscosity** | Not applicable |
| **Molecular Formula** | C20H12 |
| **Molecular Weight** | 252.31 |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactive Hazard** | None known, based on information available |
| **Stability** | Stable under normal conditions. |
| **Conditions to Avoid** | Incompatible products. |
| **Incompatible Materials** | Oxidizing agent |
| **Hazardous Decomposition Products** | Carbon monoxide (CO), Carbon dioxide ($CO_2$) |
| **Hazardous Polymerization** | Hazardous polymerization does not occur. |
| **Hazardous Reactions** | None under normal processing. |

## 11. Toxicological information

**Acute Toxicity**

**Product Information**
**Component Information**
**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** May cause sensitization by skin contact

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Benzo[a]pyrene | 50-32-8 | Group 1 | Reasonably Anticipated | A2 | X | A2 |

*IARC (International Agency for Research on Cancer)*

*IARC (International Agency for Research on Cancer)*
*Group 1 - Carcinogenic to Humans*
*Group 2A - Probably Carcinogenic to Humans*
*Group 2B - Possibly Carcinogenic to Humans*

*NTP: (National Toxicity Program)*

*NTP: (National Toxicity Program)*
*Known - Known Carcinogen*
*Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen*

*ACGIH: (American Conference of Governmental Industrial Hygienists)*

*ACGIH: (American Conference of Governmental Industrial Hygienists)*
*A1 - Known Human Carcinogen*
*A2 - Suspected Human Carcinogen*
*A3 - Animal Carcinogen*

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known
**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

**Endocrine Disruptor Information**

| Component | EU - Endocrine Disrupters Candidate List | EU - Endocrine Disruptors - Evaluated Substances | Japan - Endocrine Disruptor Information |
|---|---|---|---|
| Benzo[a]pyrene | Group III Chemical | Not applicable | Not applicable |

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity**
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

**Persistence and Degradability** May persist

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Is not likely mobile in the environment due its low water solubility.

| Component | log Pow |
|---|---|
| Benzo[a]pyrene | 6.06 |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| Component | RCRA - U Series Wastes | RCRA - P Series Wastes |
|---|---|---|
| Benzo[a]pyrene - 50-32-8 | U022 | - |

## 14. Transport information

**DOT**

**UN-No** UN3077
**Proper Shipping Name** Environmentally hazardous substances, solid, n.o.s.
**Technical Name** Benzo[a]pyrene
**Hazard Class** 9
**Packing Group** III

**TDG**

**UN-No** UN3077
**Proper Shipping Name** Environmentally hazardous substances, solid, n.o.s.
**Hazard Class** 9
**Packing Group** III

**IATA**

**UN-No** UN3077
**Proper Shipping Name** Environmentally hazardous substances, solid, n.o.s.
**Hazard Class** 9
**Packing Group** III

**IMDG/IMO**

**UN-No** UN3077
**Proper Shipping Name** Environmentally hazardous substances, solid, n.o.s.
**Hazard Class** 9
**Packing Group** III

## 15. Regulatory information

**United States of America Inventory**

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|---|---|---|---|---|
| Benzo[a]pyrene | 50-32-8 | X | ACTIVE | - |

**Legend:**
**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)** Not applicable

**TSCA 12(b)** - Notices of Export Not applicable

**International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|
| Benzo[a]pyrene | 50-32-8 | X | - | 200-028-5 | X | - | | - | X | KE-05-0184 |

**KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

**U.S. Federal Regulations**

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372. Note that PBT chemicals are not eligible for the de minimis exemption. For these chemicals, supplier notification limits are provided.
> 0 % = no low concentration cut-off set, supplier notification limit applies.

| Component | CAS No | Weight % | SARA 313 - Threshold Values % | SARA 313 - Reporting threasholds |
|---|---|---|---|---|
| Benzo[a]pyrene | 50-32-8 | > 96 | > 0 % | RT = 100 lb |

**SARA 311/312 Hazard Categories**
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Benzo[a]pyrene | - | - | X | X |

**Clean Air Act** Not applicable

**OSHA** - Occupational Safety and Health Administration Not applicable

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

| Component | Hazardous Substances RQs | CERCLA Extremely Hazardous Substances RQs | SARA Reportable Quantity (RQ) |
|---|---|---|---|
| Benzo[a]pyrene | 1 lb | - | 1 lb<br>0.454 kg |

**California Proposition 65** This product contains the following Proposition 65 chemicals.

| Component | CAS No | California Prop. 65 | Prop 65 NSRL | Category |
|---|---|---|---|---|
| Benzo[a]pyrene | 50-32-8 | Carcinogen | 0.06 µg/day | Carcinogen |

**U.S. State Right-to-Know Regulations**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Benzo[a]pyrene | X | X | X | X | X |

**U.S. Department of Transportation**
Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Authorisation/Restrictions according to EU REACH**

| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---|---|---|---|---|
| Benzo[a]pyrene | 50-32-8 | - | Use restricted. See item 72. (see link for restriction details) Use restricted. See item 30. (see link for restriction details) Use restricted. See item 28. (see link for restriction details) Use restricted. See item 50[a]. (see link for restriction details) Use restricted. See item 29. (see link for restriction details) Use restricted. See item 75. (see link for restriction details) | SVHC Candidate list - 200-028-5 - Carcinogenic (article 57a); Mutagenic (Article 57b); Toxic for reproduction (Article 57c); PBT (Article 57d); vPvB (Article 57e) |

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

**REACH links**
*https://echa.europa.eu/authorisation-list*
*https://echa.europa.eu/substances-restricted-under-reach*
*https://echa.europa.eu/candidate-list-table*

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|---|---|---|---|---|---|
| Benzo[a]pyrene | 50-32-8 | Not applicable | Annex III - Substance subject to release reduction | Not applicable | Not applicable |

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**
See table for values

**PFAS Legend**
Listed = Meets the PFAS definition of the named authority

**Other International Regulations**

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities | Seveso III Directive (2012/18/EC) - Qualifying Quantities | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|---|---|---|---|---|---|

| | | for Major Accident Notification | for Safety Report Requirements | | |
|---|---|---|---|---|---|
| Benzo[a]pyrene | 50-32-8 | Not applicable | Not applicable | Not applicable | Not applicable |

## 16. Other information

**Prepared By**
Health, Safety and Environmental Department
Email: chem.techinfo@thermofisher.com
www.thermofisher.com

**Revision Date** 25-Mar-2024
**Print Date** 25-Mar-2024
**Revision Summary** New emergency telephone response service provider.

**Disclaimer**
**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text**

**End of SDS**

# SAFETY DATA SHEET

Version 8.3
Revision Date 09/07/2024
Print Date 12/07/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Benzo[ghi]fluoranthene

Product Number : BCR139
Brand : Sigma-Aldrich
CAS-No. : 203-12-3

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

### 2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none



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operates as MilliporeSigma in the US and Canada

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | C18H10 |
| Molecular weight | : | 226.27 g/mol |
| CAS-No. | : | 203-12-3 |

No components need to be disclosed according to the applicable regulations.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**If inhaled**
After inhalation: fresh air.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Remove contact lenses.

**If swallowed**
After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Water Foam Carbon dioxide (CO2) Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides
Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.



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### 5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Dry.
**Storage stability**Recommended storage temperature
2 - 8 °C
**Storage class**
Storage class (TRGS 510): 11: Combustible Solids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Appropriate engineering controls**
Change contaminated clothing. Wash hands after working with substance.



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**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
Handle with impervious gloves.

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

**Respiratory protection**
Recommended Filter type: Filter type P1
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point: 140 °C (284 °F) |



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| | | |
|---|---|---|
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | No data available |
| l) | Vapor density | No data available |
| m) | Density | No data available |
| | Relative density | No data available |
| n) | Water solubility | slightly soluble |
| o) | Partition coefficient: n-octanol/water | log Pow: 5.46 at 25 °C (77 °F) - Potential bioaccumulation |
| p) | Autoignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | none |

**9.2 Other safety information**
No data available

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

**10.2 Chemical stability**
The product is chemically stable under standard ambient conditions (room temperature) .

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
no information available



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### 10.5 Incompatible materials
Strong oxidizing agents

### 10.6 Hazardous decomposition products
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
Oral: No data available
Inhalation: No data available
Dermal: No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.



The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

## SECTION 12: Ecological information

**12.1 Toxicity**
No data available

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Endocrine disrupting properties**
No data available

**12.7 Other adverse effects**
No data available

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

**Product**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**
Not dangerous goods

**IMDG**
Not dangerous goods

**IATA**
Not dangerous goods

**Further information**
Not classified as dangerous in the meaning of transport regulations.



The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

## SECTION 15: Regulatory information

### CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### US State Regulations

### Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

### Maine Chemicals of High Concern

Product does not contain any listed chemicals

### Vermont Chemicals of High Concern

Product does not contain any listed chemicals

### Washington Chemicals of High Concern

Product does not contain any listed chemicals

### The ingredients of this product are reported in the following inventories:

TSCA : Product contains substance(s) not listed on TSCA inventory.

### TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.



The life science business of Merck KGaA, Darmstadt, Germany
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## SECTION 16: Other information

### Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 8.3 Revision Date: 09/07/2024 Print Date: 12/07/2024



The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

# SAFETY DATA SHEET

Version 4.6
Revision Date 12/29/2015
Print Date 01/29/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Beryllium

Product Number : 378135
Brand : Aldrich

CAS-No. : 7440-41-7

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 2), H330
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Skin sensitisation (Category 1), H317
Carcinogenicity (Category 1B), H350
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Specific target organ toxicity - repeated exposure (Category 1), H372

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H301 Toxic if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H350 May cause cancer.

| | |
|---|---|
| H372 | Causes damage to organs through prolonged or repeated exposure. |

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P284 | Wear respiratory protection. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 + P310 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | Be |
| Molecular weight | : | 9.01 g/mol |
| CAS-No. | : | 7440-41-7 |
| EC-No. | : | 231-150-7 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Berylium foil** | | |
| | Acute Tox. 3; Acute Tox. 2; Skin Irrit. 2; Eye Irrit. 2A; Skin Sens. 1; Carc. 1B; STOT SE 3; STOT RE 1; H301, H315, H317, H319, H330, H335, H350, H372 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Beryllium oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.
Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Berylium foil | 7440-41-7 | TWA | 2.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | CEIL | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Peak | 25.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | TWA | 2.000000microg ram per cubic meter | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | Remarks | Z27.29-1970 | | |
| | | CEIL | 5.000000microg ram per cubic meter | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z27.29-1970 | | |
| | | Peak | 25.000000micro gram per cubic meter | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z27.29-1970 | | |
| | | TWA | 0.000050 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Beryllium sensitization<br>Chronic beryllium disease (berylliosis)<br>Confirmed human carcinogen<br>Danger of cutaneous absorption<br>Sensitizer | | |
| | | C | 0.000500 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix A | | |
| | | See Table Z-2 | | |
| | | TWA | 2.000000microg ram per cubic meter | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z27.29-1970 | | |
| | | TWA | 2.000000microg ram per cubic meter | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z27.29-1970 | | |
| | | CEIL | 5.000000microg ram per cubic meter | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z27.29-1970 | | |
| | | CEIL | 5.000000microg ram per cubic meter | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z27.29-1970 | | |
| | | Peak | 25.000000micro gram per cubic meter | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z27.29-1970 | | |
| | | Peak | 25.000000micro gram per cubic meter | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z27.29-1970 | | |
| | | TWA | 0.000050 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Beryllium sensitization | | |

| | | | | |
|---|---|---|---|---|
| | | Chronic beryllium disease (berylliosis)<br>Adopted values or notations enclosed are those for which changes are proposed in the NIC<br>See Notice of Intended Changes (NIC)<br>Confirmed human carcinogen<br>Danger of cutaneous absorption<br>Sensitizer | | |
| | | C | 0.000500 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix A | | |
| | | See Table Z-2 | | |
| | | TWA | 2microgram per cubic meter | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z27.29-1970 | | |
| | | CEIL | 5microgram per cubic meter | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z27.29-1970 | | |
| | | Peak | 25microgram per cubic meter | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z27.29-1970 | | |
| | | C | 0.0005 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix A | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: powder<br>Colour: grey |
| b) | Odour | odourless |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 1,278 °C (2,332 °F) - lit. |
| f) | Initial boiling point and boiling range | 2,970 °C (5,378 °F) - lit. |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 1.85 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information
No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity
No data available

### 10.2 Chemical stability
Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Alkali metals

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
No data available

Inhalation: No data available

Dermal: No data available

LD50 Intravenous - Rat - 0.496 mg/kg
Remarks: Liver:Hepatitis (hepatocellular necrosis), zonal.

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
Hamster
Lungs
Result: negative

**Carcinogenicity**

Carcinogenicity - Rat - Intratracheal
Tumorigenic:Neoplastic by RTECS criteria. Lungs, Thorax, or Respiration:Tumors. Lungs, Thorax, or Respiration:Bronchiogenic carcinoma.

Carcinogenicity - Rabbit - Intravenous
Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Musculoskeletal:Tumors.

Possible human carcinogen

| | |
|---|---|
| IARC: | 1 - Group 1: Carcinogenic to humans (Berylium foil) |
| NTP: | Known to be human carcinogen (Berylium foil) |
| | Known to be human carcinogenThe reference note has been added by TD based on the background information of the NTP. (Berylium foil) |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: DS1750000

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**
No data available

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

No data available

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1567 Class: 6.1 (4.1) Packing group: II
Proper shipping name: Beryllium, powder
Reportable Quantity (RQ): 10 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 1567 Class: 6.1 (4.1) Packing group: II EMS-No: F-G, S-G
Proper shipping name: BERYLLIUM POWDER

**IATA**
UN number: 1567 Class: 6.1 (4.1) Packing group: II
Proper shipping name: Beryllium powder

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Berylium foil | 7440-41-7 | 1993-04-24 |

**SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Berylium foil | 7440-41-7 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Berylium foil | 7440-41-7 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Berylium foil | 7440-41-7 | 1993-04-24 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| Berylium foil | 7440-41-7 | 2008-10-10 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Carc. | Carcinogenicity |
| Eye Irrit. | Eye irritation |
| H301 | Toxic if swallowed. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H335 | May cause respiratory irritation. |
| H350 | May cause cancer. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| Skin Irrit. | Skin irritation |
| Skin Sens. | Skin sensitisation |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 4 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 4 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 3 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

# SAFETY DATA SHEET

Version 5.6
Revision Date 05/23/2016
Print Date 06/22/2017

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : β-HCH

Product Number : 33376
Brand : Sigma-Aldrich
Index-No. : 602-042-00-0

CAS-No. : 319-85-7

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Dermal (Category 4), H312
Carcinogenicity (Category 2), H351
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H301 Toxic if swallowed.
H312 Harmful in contact with skin.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

| | |
|---|---|
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P322 | Specific measures (see supplemental first aid instructions on this label). |
| P330 | Rinse mouth. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $C_6H_6Cl_6$ |
| Molecular weight | : | 290.83 g/mol |
| CAS-No. | : | 319-85-7 |
| EC-No. | : | 206-271-3 |
| Index-No. | : | 602-042-00-0 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **(1α,2β,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane** | | |
| | Acute Tox. 3; Acute Tox. 4; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H301, H312, H351, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
No data available

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | > 300.0 °C (> 572.0 °F) |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | insoluble |
| o) | Partition coefficient: n- | log Pow: 3.78 |

| | | |
|---|---|---|
| | octanol/water | |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 6,000 mg/kg

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

IARC: 2B - Group 2B: Possibly carcinogenic to humans ((1α,2β,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: Reasonably anticipated to be a human carcinogen ((1α,2β,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: GV4375000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Blood -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Poecilia reticulata (guppy) - 1.6 mg/l - 96.0 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Cyprinus carpio (Carp) - 35 d<br>- 0.05 mg/l |
| | Bioconcentration factor (BCF): 500 |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### DOT (US)

UN number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solids, organic, n.o.s. ((1α,2β,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)
Reportable Quantity (RQ): 1 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

### IMDG

UN number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. ((1α,2β,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)

### IATA

UN number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solid, organic, n.o.s. ((1α,2β,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)

## 15. REGULATORY INFORMATION

### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

### California Prop. 65 Components

| | | |
|---|---|---|
| WARNING! This product contains a chemical known to the State of California to cause cancer. (1α,2β,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane | CAS-No. 319-85-7 | Revision Date 2009-02-01 |

## 16. OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3.

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H301 | Toxic if swallowed. |
| H312 | Harmful in contact with skin. |
| H351 | Suspected of causing cancer. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

### HMIS Rating

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

### NFPA Rating

| | |
|---|---|
| Health hazard: | 1 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.6 Revision Date: 05/23/2016 Print Date: 06/22/2017

# SAFETY DATA SHEET

Version 5.2
Revision Date 06/27/2014
Print Date 07/04/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Endosulfan II (beta)

Product Number : 48578
Brand : Supelco

CAS-No. : 33213-65-9

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H301 Toxic if swallowed.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P321 Specific treatment (see supplemental first aid instructions on this label).
P330 Rinse mouth.
P391 Collect spillage.
P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Synonyms : β-Endosulfan

Formula : C9H6Cl6O3S
Molecular Weight : 406.93 g/mol
CAS-No. : 33213-65-9

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **β-Endosulfan** | | |
| | Acute Tox. 3; Aquatic Acute 1; Aquatic Chronic 1; H301, H410 | - |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
no data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Sulphur oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self contained breathing apparatus for fire fighting if necessary.

**5.4 Further information**
no data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

**8.2 Exposure controls**

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odour | no data available |
| c) | Odour Threshold | no data available |
| d) | pH | no data available |
| e) | Melting point/freezing point | no data available |
| f) | Initial boiling point and boiling range | no data available |
| g) | Flash point | no data available |
| h) | Evapouration rate | no data available |
| i) | Flammability (solid, gas) | no data available |
| j) | Upper/lower flammability or explosive limits | no data available |
| k) | Vapour pressure | no data available |
| l) | Vapour density | no data available |
| m) | Relative density | no data available |
| n) | Water solubility | no data available |
| o) | Partition coefficient: n-octanol/water | no data available |
| p) | Auto-ignition temperature | no data available |
| q) | Decomposition temperature | no data available |
| r) | Viscosity | no data available |
| s) | Explosive properties | no data available |
| t) | Oxidizing properties | no data available |

### 9.2 Other safety information
no data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity
no data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
no data available

**10.4 Conditions to avoid**
no data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - no data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - rat - 240.0 mg/kg

Inhalation: no data available

Dermal: no data available

no data available

**Skin corrosion/irritation**
no data available

**Serious eye damage/eye irritation**
no data available

**Respiratory or skin sensitisation**
no data available

**Germ cell mutagenicity**
no data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
no data available

no data available

**Specific target organ toxicity - single exposure**
no data available

**Specific target organ toxicity - repeated exposure**
no data available

**Aspiration hazard**
no data available

**Additional Information**
RTECS: RB9875200

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Kidney -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - other fish - 0.0066 mg/l - 96 h |
| Toxicity to daphnia and other aquatic invertebrates | LC50 - Daphnia magna (Water flea) - > 0.1 - < 1 mg/l - 48 h |

### 12.2 Persistence and degradability
no data available

### 12.3 Bioaccumulative potential
Bioaccumulation other fish - 21 d
- 0.0001 mg/l

Bioconcentration factor (BCF): 9,908

### 12.4 Mobility in soil
no data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solids, organic, n.o.s. (β-Endosulfan)
Reportable Quantity (RQ): 1 lbs
Marine pollutant: Marine pollutant
Poison Inhalation Hazard: No

**IMDG**
UN number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (β-Endosulfan)
Marine pollutant: No

**IATA**
UN number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solid, organic, n.o.s. (β-Endosulfan)

## 15. REGULATORY INFORMATION

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| β-Endosulfan | 33213-65-9 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| β-Endosulfan | 33213-65-9 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| β-Endosulfan | 33213-65-9 | 1993-04-24 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| H301 | Toxic if swallowed. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**
Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.2 Revision Date: 06/27/2014 Print Date: 07/04/2016

# SAFETY DATA SHEET

Version 5.11
Revision Date 06/18/2015
Print Date 02/11/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Bis(2-ethylhexyl) phthalate

Product Number : 80030
Brand : Sigma-Aldrich
Index-No. : 607-317-00-9

CAS-No. : 117-81-7

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Reproductive toxicity (Category 1B), H360

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H360 May damage fertility or the unborn child.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Endocrine disrupting chemical(s)

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| | | |
|---|---|---|
| Synonyms | : | 'Dioctyl' phthalate<br>Phthalic acid bis(2-ethylhexyl ester)<br>DEHP |
| Formula | : | $C_{24}H_{38}O_4$ |
| Molecular weight | : | 390.56 g/mol |
| CAS-No. | : | 117-81-7 |
| EC-No. | : | 204-211-0 |
| Index-No. | : | 607-317-00-9 |
| Registration number | : | 01-2119484611-38-XXXX |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **bis(2-Ethylhexyl) phthalate** Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH) | | |
| | Repr. 1B; H360 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| bis(2-Ethylhexyl) phthalate | 117-81-7 | TWA | 5.000000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Lower Respiratory Tract irritation<br>Confirmed animal carcinogen with unknown relevance to humans | | |
| | | TWA | 5.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix A | | |
| | | ST | 10.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix A | | |
| | | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |

### 8.2 Exposure controls

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.2 mm
Break through time: 480 min
Material tested:Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 230 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | -50.0 °C (-58.0 °F) |
| f) | Initial boiling point and boiling range | 386 °C (727 °F) - lit. |
| g) | Flash point | 207.0 °C (404.6 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Lower explosion limit: 0.3 %(V) |
| k) | Vapour pressure | 1.6 hPa (1.2 mmHg) at 93.0 °C (199.4 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 0.985 g/cm3 at 20 °C (68 °F) |
| n) | Water solubility | insoluble |

| | | |
|---|---|---|
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | 390.0 °C (734.0 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 30,000 mg/kg

Inhalation: No data available

LD50 Dermal - Rabbit - 25,000 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Mild skin irritation - 24 h

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Mild eye irritation - 24 h

**Respiratory or skin sensitisation**
Maximisation Test (GPMT) - Guinea pig
Result: Does not cause skin sensitisation.
(OECD Test Guideline 406)

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 2B - Group 2B: Possibly carcinogenic to humans (bis(2-Ethylhexyl) phthalate)

NTP: Reasonably anticipated to be a human carcinogen (bis(2-Ethylhexyl) phthalate)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
May cause congenital malformation in the fetus.
Presumed human reproductive toxicant

May cause reproductive disorders.

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: TI0350000

Effects due to ingestion may include:, Gastrointestinal disturbance

Kidney -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Pimephales promelas (fathead minnow) - > 0.67 mg/l - 96 h |
| | LC50 - Oncorhynchus mykiss (rainbow trout) - > 0.32 mg/l - 96 h |
| | LC50 - Cyprinodon variegatus (sheepshead minnow) - > 0.17 mg/l - 96 h |
| | LC50 - Lepomis macrochirus (Bluegill) - > 0.20 mg/l - 96 h |
| | NOEC - other fish - > 0.3 mg/l - 96 h |
| Toxicity to daphnia and other aquatic invertebrates | Immobilization EC50 - Daphnia magna (Water flea) - > 0.16 mg/l - 48 h |

### 12.2 Persistence and degradability

| | |
|---|---|
| Biodegradability | Result: - Readily biodegradable<br>(OECD Test Guideline 301) |

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Oncorhynchus mykiss (rainbow trout) - 100 d<br>- 0.014 mg/l<br><br>Bioconcentration factor (BCF): 113<br>Remarks: Does not bioaccumulate. |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

No data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3082 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (bis(2-Ethylhexyl) phthalate)
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**
Not dangerous goods

**IATA**
Not dangerous goods

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 2007-07-01 |

**SARA 311/312 Hazards**
Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| bis(2-Ethylhexyl) phthalate | 117-81-7 | 2007-07-01 |

**California Prop. 65 Components**

| | | |
|---|---|---|
| WARNING! This product contains a chemical known to the State of California to cause cancer. bis(2-Ethylhexyl) phthalate | CAS-No. 117-81-7 | Revision Date 2009-02-01 |
| WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. bis(2-Ethylhexyl) phthalate | CAS-No. 117-81-7 | Revision Date 2009-02-01 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| H360 | May damage fertility or the unborn child. |
| Repr. | Reproductive toxicity |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Chronic Health Hazard: | * |
| Flammability: | 1 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Fire Hazard: | 1 |
| Reactivity Hazard: | 0 |

**Further information**

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**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.11 Revision Date: 06/18/2015 Print Date: 02/11/2016

# SAFETY DATA SHEET

**Revision Date** 24-Dec-2021 **Revision Number** 4

## 1. Identification

**Product Name** **Cadmium**

**Cat No. :** **C3-500**

**CAS No** 7440-43-9
**Synonyms** No information available

**Recommended Use** Laboratory chemicals.
**Uses advised against** Food, drug, pesticide or biocidal product use.

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Emergency Telephone Number** CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

## 2. Hazard(s) identification

**Classification**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Flammable solids | Category 2 |
| Acute oral toxicity | Category 4 |
| Acute dermal toxicity | Category 4 |
| Acute Inhalation Toxicity - Dusts and Mists | Category 2 |
| Germ Cell Mutagenicity | Category 2 |
| Carcinogenicity | Category 1A |
| Reproductive Toxicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Respiratory system. | |
| Specific target organ toxicity - (repeated exposure) | Category 1 |
| Target Organs - Kidney, Blood. | |
| Combustible dust | Yes |

**Label Elements**

**Signal Word**

Danger

**Hazard Statements**
Flammable solid
May form combustible dust concentrations in air
Fatal if inhaled
Harmful if swallowed
Harmful in contact with skin
May cause respiratory irritation
Suspected of causing genetic defects
May cause cancer
Suspected of damaging fertility. Suspected of damaging the unborn child
Causes damage to organs through prolonged or repeated exposure



**Precautionary Statements**
**Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting equipment
**Response**
IF exposed or concerned: Get medical attention/advice
**Inhalation**
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
**Skin**
IF ON SKIN: Wash with plenty of soap and water
Wash contaminated clothing before reuse
Call a POISON CENTER or doctor/physician if you feel unwell
**Ingestion**
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
**Fire**
Fight fire with normal precautions from a reasonable distance
Evacuate area
**Storage**
Store locked up
Store in a well-ventilated place. Keep container tightly closed
**Disposal**
Dispose of contents/container to an approved waste disposal plant
**Hazards not otherwise classified (HNOC)**
Very toxic to aquatic life with long lasting effects
WARNING. Cancer and Reproductive Harm - https://www.p65warnings.ca.gov/.

## 3. Composition/Information on Ingredients

| Component | CAS No | Weight % |
|---|---|---|
| Cadmium | 7440-43-9 | 100 |

## 4. First-aid measures

**General Advice** Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

**Ingestion** Do NOT induce vomiting. Call a physician or poison control center immediately.

**Most important symptoms and effects** None reasonably foreseeable. . Kidney disorders: May cause harm to the unborn child: Blood disorders

**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available
**Method -** No information available

**Autoignition Temperature** No information available

**Explosion Limits**
**Upper** No data available
**Lower** No data available
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Thermal decomposition can lead to release of irritating gases and vapors. Fine dust dispersed in air may ignite. Dust can form an explosive mixture with air. Pyrophoric properties of solids and liquids. Do not allow run-off from fire-fighting to enter drains or water courses.

**Hazardous Combustion Products**
Toxic fumes.
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 4 | 1 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust

formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**Methods for Containment and Clean Up** Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

## 7. Handling and storage

**Handling** Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.

**Storage.** Keep containers tightly closed in a dry, cool and well-ventilated place. Store under an inert atmosphere. Incompatible Materials. Strong oxidizing agents. Strong acids. Sulfur oxides.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH | Mexico OEL (TWA) |
|---|---|---|---|---|
| Cadmium | TWA: 0.01 mg/m³<br>TWA: 0.002 mg/m³ | Ceiling: 0.3 mg/m³<br>Ceiling: 0.6 mg/m³<br>(Vacated) STEL: 0.3 ppm<br>TWA: 0.1 mg/m³<br>TWA: 0.2 mg/m³<br>TWA: 5 µg/m³ | IDLH: 9 mg/m³ | TWA: 0.01 mg/m³<br>TWA: 0.002 mg/m³ |

*Legend*

*ACGIH - American Conference of Governmental Industrial Hygienists*
*OSHA - Occupational Safety and Health Administration*
*NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health*

**Engineering Measures** Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** When using do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes or clothing. Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feeding stuffs.

## 9. Physical and chemical properties

**Physical State** Solid

| | |
|---|---|
| **Appearance** | Silver |
| **Odor** | Odorless |
| **Odor Threshold** | No information available |
| **pH** | No information available |
| **Melting Point/Range** | 321 °C / 609.8 °F |
| **Boiling Point/Range** | 765 °C / 1409 °F @ 760 mmHg |
| **Flash Point** | No information available |
| **Evaporation Rate** | Not applicable |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | No information available |
| **Vapor Density** | Not applicable |
| **Specific Gravity** | 8.64 @ 25°C |
| **Solubility** | Insoluble in water |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | No information available |
| **Decomposition Temperature** | No information available |
| **Viscosity** | Not applicable |
| **Molecular Formula** | Cd |
| **Molecular Weight** | 112.40 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under recommended storage conditions. Moisture sensitive. Air sensitive.

**Conditions to Avoid** Incompatible products. Excess heat. Avoid dust formation. Exposure to air or moisture over prolonged periods.

**Incompatible Materials** Strong oxidizing agents, Strong acids, Sulfur oxides

**Hazardous Decomposition Products** Toxic fumes

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information**

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Cadmium | LD50 = 2330 mg/kg ( Rat ) | Not listed | LC50 = 25 mg/m³ ( Rat ) 30 min |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Cadmium | 7440-43-9 | Group 1 | Known | A2 | X | A2 |

| | |
|---|---|
| *IARC (International Agency for Research on Cancer)* | *IARC (International Agency for Research on Cancer)*<br>*Group 1 - Carcinogenic to Humans*<br>*Group 2A - Probably Carcinogenic to Humans*<br>*Group 2B - Possibly Carcinogenic to Humans* |
| *NTP: (National Toxicity Program)* | *NTP: (National Toxicity Program)*<br>*Known - Known Carcinogen*<br>*Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen* |
| *ACGIH: (American Conference of Governmental Industrial Hygienists)* | *A1 - Known Human Carcinogen*<br>*A2 - Suspected Human Carcinogen*<br>*A3 - Animal Carcinogen*<br>*ACGIH: (American Conference of Governmental Industrial Hygienists)* |

**Mutagenic Effects** Possible risk of irreversible effects

**Reproductive Effects** Possible risk of impaired fertility. May cause harm to the unborn child.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Respiratory system
**STOT - repeated exposure** Kidney Blood

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** Kidney disorders: May cause harm to the unborn child: Blood disorders

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information



**Ecotoxicity**

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|
| Cadmium | Not listed | LC50: 0.0004 - 0.003 mg/L, 96h (Pimephales promelas)<br>LC50: = 0.016 mg/L, 96h (Oryzias latipes)<br>LC50: = 21.1 mg/L, 96h flow-through (Lepomis macrochirus)<br>LC50: = 0.24 mg/L, 96h static (Cyprinus carpio)<br>LC50: = 4.26 mg/L, 96h semi-static (Cyprinus carpio)<br>LC50: = 0.002 mg/L, 96h | Not listed | EC50: = 0.0244 mg/L, 48h Static (Daphnia magna) |

| | | | | |
|---|---|---|---|---|
| | | (Cyprinus carpio)<br>LC50: = 0.006 mg/L, 96h static (Oncorhynchus mykiss)<br>LC50: = 0.003 mg/L, 96h flow-through (Oncorhynchus mykiss) | | |

**Persistence and Degradability** No information available

**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT**

| | |
|---|---|
| **UN-No** | UN2930 |
| **Proper Shipping Name** | Toxic solid, flammable, organic, n.o.s. |
| **Technical Name** | Cadmium |
| **Hazard Class** | 6.1 |
| **Subsidiary Hazard Class** | 4.1 |
| **Packing Group** | I |

**TDG**

| | |
|---|---|
| **UN-No** | UN2930 |
| **Proper Shipping Name** | Toxic solid, flammable, organic, n.o.s. |
| **Hazard Class** | 6.1 |
| **Subsidiary Hazard Class** | 4.1 |
| **Packing Group** | I |

**IATA**

| | |
|---|---|
| **UN-No** | UN2930 |
| **Proper Shipping Name** | Toxic solid, flammable, organic, n.o.s. |
| **Hazard Class** | 6.1 |
| **Subsidiary Hazard Class** | 4.1 |
| **Packing Group** | I |

**IMDG/IMO**

| | |
|---|---|
| **UN-No** | UN2930 |
| **Proper Shipping Name** | Toxic solid, flammable, organic, n.o.s. |
| **Hazard Class** | 6.1 |
| **Subsidiary Hazard Class** | 4.1 |
| **Packing Group** | I |

## 15. Regulatory information

**United States of America Inventory**

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|---|---|---|---|---|
| Cadmium | 7440-43-9 | X | ACTIVE | - |

**Legend:**
**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

**International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 7440-43-9 | X | - | 231-152-8 | X | X | | X | X | KE-04397 |

**KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

**U.S. Federal Regulations**

**SARA 313**

| Component | CAS No | Weight % | SARA 313 - Threshold Values % |
|---|---|---|---|
| Cadmium | 7440-43-9 | 100 | 0.1 |

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Cadmium | - | - | X | X |

**Clean Air Act**

**OSHA** - Occupational Safety and Health Administration Not applicable

| Component | Specifically Regulated Chemicals | Highly Hazardous Chemicals |
|---|---|---|
| Cadmium | 5 µg/m³ TWA<br>2.5 µg/m³ Action Level | - |

**CERCLA** This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Cadmium | 10 lb | - |

**California Proposition 65** This product contains the following Proposition 65 chemicals.

| Component | CAS No | California Prop. 65 | Prop 65 NSRL | Category |
|---|---|---|---|---|
| Cadmium | 7440-43-9 | Carcinogen<br>Developmental<br>Male Reproductive | 0.05 µg/day | Developmental<br>Carcinogen |

**U.S. State Right-to-Know Regulations**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Cadmium | X | X | X | X | X |

**U.S. Department of Transportation**

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Authorisation/Restrictions according to EU REACH**

| Component | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|---|---|---|---|
| Cadmium | - | Use restricted. See item 72. (see link for restriction details) Use restricted. See item 23. (see link for restriction details) Use restricted. See item 28. (see link for restriction details) Use restricted. See item 75. (see link for restriction details) | SVHC Candidate list - 231-152-8 - Carcinogenic, Article 57a;Specific target organ toxicity after repeated exposure, Article 57(f) - human health |

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

*https://echa.europa.eu/authorisation-list*
*https://echa.europa.eu/substances-restricted-under-reach*
*https://echa.europa.eu/candidate-list-table*

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|---|---|---|---|---|---|
| Cadmium | 7440-43-9 | Listed | Not applicable | Not applicable | 0.01% (Max. Conc.) |

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|---|---|---|---|---|---|
| Cadmium | 7440-43-9 | Not applicable | Not applicable | Not applicable | Annex I - Y26 |

## 16. Other information

**Prepared By** Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Revision Date** 24-Dec-2021
**Print Date** 24-Dec-2021
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**
**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text**

**End of SDS**

## SECTION 1: Identification of the substance/mixture and of the company/ undertaking

### 1.1 Product identifier

Calcium metal, granular (102780)

Calcium metal, granular ; CAS No. : 7440-70-2 ; EC No. : 231-179-5 ; Index No. : 020-001-00-X ; REACH No. : 01-2119516038-45-XXXX

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

#### Relevant identified uses

For manufacturing, processing, laboratory or repacking use only.

#### Uses advised against

Uses other than those recommended.

### 1.3 Details of the supplier of the safety data sheet

#### Supplier (manufacturer/importer/only representative/downstream user/distributor)

DC Fine Chemicals Ltd

**Street :** 88 Hill Top

**Postal code/City :** NW11 6DY London United Kingdom

**Telephone :** +44 (0)20 7586 6800

**Telefax :** +44 (0)20 7504 1701

**Information contact :** info@dcfinechemicals.com

### 1.4 Emergency telephone number

(Only available during office hours; Monday-Friday; 08:00-18:00)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 [CLP]

Water-react. 2 ; H261 - Substances or mixtures which, in contact with water, emit flammable gases : Category 2 ; In contact with water releases flammable gases.

### 2.2 Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

**Hazard pictograms**



Flame (GHS02)

**Signal word**

DANGER

**Hazard statements**

H261 In contact with water releases flammable gases.

**Precautionary statements**

| | |
|---|---|
| P223 | Do not allow contact with water. |
| P231+P232 | Handle and store contents under inert gas. Protect from moisture. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P302+P335+P334 | IF ON SKIN: Brush off loose particles from skin. Immerse in cool water [or wrap in wet bandages]. |
| P370+P378 | In case of fire: Use ... to extinguish. |
| P402+P404 | Store in a dry place. Store in a closed container. |

### 2.3 Other hazards

None

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

**Substance name :** Calcium metal, granular

**Index No. :** 020-001-00-X

**EC No. :** 231-179-5

**REACH No. :** 01-2119516038-45-XXXX

**CAS No. :** 7440-70-2

**Purity :** 100 % [mass]

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Remove victim out of the danger area. When in doubt or if symptoms are observed, get medical advice.

### 4.2 Most important symptoms and effects, both acute and delayed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps.

### 4.3 Indication of any immediate medical attention and special treatment needed

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

## SECTION 5: Firefighting measures

The product is Highly inflammable, it can cause or considerably worsen a fire, the necessary prevention measures should be taken and risks avoided. In case of fire, the following measures are recommended:

### 5.1 Extinguishing media

#### Suitable extinguishing media

Extinguisher powder or CO2. In case of more serious fires, also alcohol-resistant foam and water spray.

#### Unsuitable extinguishing media

Do not use a direct stream of water to extinguish. In the presence of electrical voltage, you cannot use water or foam as extinguishing media.

### 5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Pyrolysis products, toxic

### 5.3 Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Do not inhale explosion and combustion gases. In case of fire: Wear self-contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Wear a self-contained breathing apparatus and chemical protective clothing.

#### For emergency responders

Eliminate possible ignition points and ventilate the area. No smoking. Avoid breathing fumes.For exposure control and individual protection measures, see section 8.

### 6.2 Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Retain contaminated washing water and dispose it.

### 6.3 Methods and material for containment and cleaning up

#### For containment

Collect in closed and suitable containers for disposal.

#### For cleaning up

The contaminated area should be cleaned up immediately with: Water Soak up inert absorbent and dispose as waste requiring special attention. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Avoid dust formation. Clear spills immediately.

### 6.4 Reference to other sections

Reference to other sections Disposal: see section 13 Personal protection equipment: see section 8

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

#### Protective measures



When using do not eat, drink, smoke, sniff. Wear personal protection equipment (refer to section 8).

**Measures to prevent aerosol and dust generation**

Vapours can form explosive mixtures with air. Take precautionary measures against static discharges. Use only in well-ventilated areas. Do not breathe gas/fumes/vapour/spray. Do not breathe dust.

**Environmental precautions**

Use appropriate container to avoid environmental contamination.

**Specific requirements or handling rules**

Handle and open container with care.

### Advices on general occupational hygiene

Take care for general good hygiene and housekeeping.

## 7.2 Conditions for safe storage, including any incompatibilities

### Technical measures and storage conditions

**Storage temperature :**
Keep in a cool, well-ventilated place. Keep away from sources of ignition - No smoking.

### Requirements for storage rooms and vessels

Only use containers specifically approved for the substance/product.

### Hints on joint storage

Store at least 3 metres apart from: Chemicals/products that react together readily Protect against Humidity. UV-radiation/sunlight

**Storage class (TRGS 510) :** 4.3

## 7.3 Specific end use(s)

None

# SECTION 8: Exposure controls/personal protection

## 8.1 Control parameters

None

## 8.2 Exposure controls

Only wear fitting, comfortable and clean protective clothing.

### Personal protection equipment

### Eye/face protection



Eye glasses with side protection Face protection shield EN 166

### Skin protection

**Hand protection**



Tested protective gloves must be worn EN ISO 374

**Body protection**

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes). Wear anti-static footwear and clothing Wash contaminated clothing prior to re-use.



### Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.



Particle filter device (EN 143).

### Thermal hazards

No special measures are necessary.

### Environmental exposure controls

No information available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**Appearance :** solid

### Safety characteristics

| | | | | |
|---|---|---|---|---|
| **Melting point/freezing point :** | ( 1013 hPa ) | 850 | °C | |
| **Initial boiling point and boiling range :** | ( 1013 hPa ) | 1175 | °C | |
| **Decomposition temperature :** | ( 1013 hPa ) | No data available | | |
| **Flash point :** | | No data available | | |
| **Auto-ignition temperature :** | | No data available | | |
| **Lower explosion limit :** | | No data available | | |
| **Upper explosion limit :** | | No data available | | |
| **Vapour pressure :** | ( 50 °C ) | No data available | | |
| **Density :** | ( 20 °C ) | No data available | | |
| **Solvent separation test :** | ( 20 °C ) | not applicable | | |
| **Water solubility :** | ( 20 °C ) | 4 | g/l | |
| **Fat solubility :** | ( 20 °C ) | No data available. | | |
| **pH :** | | 14 | | |
| **log P O/W :** | | No data available | | |
| **Flow time :** | ( 20 °C ) | No data available | | DIN-cup 4 mm |
| **Viscosity :** | ( 20 °C ) | No data available | | |
| **Relative vapour density :** | ( 20 °C ) | No data available | | |
| **Evaporation rate :** | | No data available | | |
| **Flammable solids :** | No data available. | | | |
| **Flammable gases :** | No data available. | | | |
| **Explosive properties :** | No data available. | | | |

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The product does not present hazards by their reactivity.

### 10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature. Safe handling: see

section 7

### 10.3 Possibility of hazardous reactions
The product does not present possibility of hazardous reactions.

### 10.4 Conditions to avoid
Avoid any improper handling.

### 10.5 Incompatible materials
Keep away from oxidising agents and from highly alkaline or acidic materials in order to prevent exothermic reactions.

### 10.6 Hazardous decomposition products
In case of fire may be liberated: Hazardous combustion products

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
#### Acute toxicity
No information available.
#### Corrosion
**Skin corrosion/irritation**
No information available.
**Serious eye damage/eye irritation**
No information available.
#### Respiratory or skin sensitisation
No information available.
#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)
**Carcinogenicity**
No information available.
**Germ cell mutagenicity**
No information available.
**Reproductive toxicity**
No information available.
#### STOT-single exposure
No information available.
#### STOT-repeated exposure
No information available.
#### Aspiration hazard
No information available.

### 11.2 Information on other hazards
No information available.

## SECTION 12: Ecological information

### 12.1 Toxicity
#### Aquatic toxicity
**Acute (short-term) toxicity to crustacea**

| | |
|---|---|
| Parameter : | EC50 ( Calcium metal, granular ; CAS No. : 7440-70-2 ) |
| Species : | Daphnia magna (Big water flea) |
| Evaluation parameter : | Acute (short-term) toxicity to crustacea |
| Effective dose : | 330 mg/l |
| Exposure time : | 48 hour(s) |

### 12.2 Persistence and degradability
No information available.

### 12.3 Bioaccumulative potential
No information available.

### 12.4 Mobility in soil
No information available.

### 12.5 Results of PBT and vPvB assessment
This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

### 12.6 Endocrine disrupting properties
No information available.

### 12.7 Other adverse effects
No information available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation. Follow the provisions of Directive 2008/98/EC regarding waste management.

#### Product/Packaging disposal
**Waste treatment options**
Recycle according to official regulations. Evidence for disposal must be provided.

**Appropriate disposal / Product**
Dispose of waste according to applicable legislation.

**Appropriate disposal / Package**
Non-contaminated packages must be recycled or disposed of. Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of. Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

### 14.1 UN number
UN 1401

### 14.2 UN proper shipping name
**Land transport (ADR/RID)**
CALCIUM

**Sea transport (IMDG)**
CALCIUM

**Air transport (ICAO-TI / IATA-DGR)**

CALCIUM

### 14.3 Transport hazard class(es)

**Land transport (ADR/RID)**

| | |
|---|---|
| **Class(es) :** | 4.3 |
| **Classification code :** | W2 |
| **Hazard identification number (Kemler No.) :** | 423 |
| **Tunnel restriction code :** | D/E |
| **Special provisions :** | LQ 500 g · E 2 |
| **Hazard label(s) :** | 4.3 |

**Sea transport (IMDG)**

| | |
|---|---|
| **Class(es) :** | 4.3 |
| **EmS-No. :** | F-G / S-O |
| **Special provisions :** | LQ 500 g · E 2 · IMDG-Code segregation group 26 · IMDG-Code segregation group 35 |
| **Hazard label(s) :** | 4.3 |

**Air transport (ICAO-TI / IATA-DGR)**

| | |
|---|---|
| **Class(es) :** | 4.3 |
| **Special provisions :** | E 2 |
| **Hazard label(s) :** | 4.3 |

### 14.4 Packing group

II

### 14.5 Environmental hazards

**Land transport (ADR/RID) :** No
**Sea transport (IMDG) :** No
**Air transport (ICAO-TI / IATA-DGR) :** No

### 14.6 Special precautions for user

**Hazard label(s) :**



### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No information available.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Classification according to Regulation (EC) No 1272/2008 [CLP] according to Regulation (EU) No. 2020/878

**EU legislation**

**Authorisations and/or restrictions on use**

**Restrictions on use**

**Regulation (EC) No. 1907/2006 (REACH), Annex XVII (restrictions)**

Use restriction according to REACH annex XVII, no. : 3

**National regulations**
**Water hazard class**
Class : nwg (Non-hazardous to water)

### 15.2 Chemical Safety Assessment
No information available.

## SECTION 16: Other information

### 16.1 Indication of changes
None

### 16.2 Abbreviations and acronyms

| | |
|---|---|
| ADR: | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ASTM: | ASTM International, originally known as American Society for Testing and Materials (ASTM) |
| EINECS: | European Inventory of Existing Commercial Chemical Substances |
| EC50: | Effective Concentration 50 (Maximum Effective Concentration for 0% of Individuals) |
| LC50: | Lethal Concentration 50 (Lethal Concentration for 50% of Individuals) |
| IC50: | Inhibitor Concentration 50 (Inhibitory Concentration for 50% of Individuals) |
| NOEL: | No Observed Effect Level (Maximum dose without effect) |
| DNEL: | Derived No Effect Level (Derived no-effect dose) |
| DMEL: | Derived Minimum Effect Level (Derived dose of minimal effect) |
| CLP: | Classification, Labelling and Packaging |
| CSR: | Chemical Safety Report |
| LD50: | Lethal Dose 50 (Lethal Dose for 50% of Individuals) |
| IATA: | International Air Transport Association |
| ICAO: | International Civil Aviation Organization |
| Codice IMDG: | International Maritime Dangerous Goods code |
| PBT: | Persistent, bioaccumulative and toxic |
| RID: | Regulations concerning the international rail transport of Dangerous Goods |
| STEL: | Short term exposure limit |
| TLV: | Threshold limit value |
| TWA: | Time Weighted Average |
| UE: | European Union |
| vPvB: | Very persistent very bioaccumulative |
| N.D.: | Uvailable |
| N.A.: | Not applicable |
| VwVwS.: | Text of Administrative Regulation on the Classification of Substances hazardous to waters into Water Hazard Classes |

### 16.3 Key literature references and sources for data
None

### 16.4 Relevant H- and EUH-phrases (Number and full text)
H261 In contact with water releases flammable gases.

### 16.5 Training advice
None

### 16.6 Additional information
None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

| Caprolactam<br>CAS No 105-60-2 | MATERIAL SAFETY DATA SHEET<br>SDS/MSDS |
|---|---|

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : **Caprolactam**

CAS-No. : 105-60-2

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

### 1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd
7/28 Vardaan House
New Delhi-10002
INDIA

Telephone : +91 11 49404040
Email : care@cdhfinechemical.com

### 1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Skin irritation (Category 2), H315
Eye irritation (Category 2), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 Label elements

**Labelling according Regulation (EC) No 1272/2008**
Pictogram




Signal word Warning

Hazard statement(s)
H302 + H332 Harmful if swallowed or if inhaled
H315 Causes skin irritation.

| | |
|---|---|
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

Precautionary statement(s)

| | |
|---|---|
| P261 | Avoid breathing dust. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

| | |
|---|---|
| Supplemental Hazard Statements | none |

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

**3.1 Substances**

| | | |
|---|---|---|
| Synonyms | : | Aza-2-cycloheptanone<br>2-Oxohexamethyleneimine<br>epsilon-Caprolactam |
| Formula | : | C6H11NO |
| Molecular weight | : | 113.16 g/mol |
| CAS-No. | : | 105-60-2 |
| EC-No. | : | 203-313-2 |
| Index-No. | : | 613-069-00-2 |

**Hazardous ingredients according to Regulation (EC) No 1272/2008**

| Component | | Classification | Concentration |
|---|---|---|---|
| **ε-Caprolactam** | | | |
| CAS-No. | 105-60-2 | Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H302, H332, H315, H319, H335 | <= 100 % |
| EC-No. | 203-313-2 | | |
| Index-No. | 613-069-00-2 | | |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

**4.1 Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides, Nitrogen oxides (NOx)

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
No data available

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions
Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

hygroscopic
Storage class (TRGS 510): Non Combustible Solids

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle r (US) or type ABEKP2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| a) Appearance | Form: crystalline<br>Colour: colourless |
| b) Odour | No data available |
| c) Odour Threshold | No data available |
| d) pH | 7.0 - 8.5 at 333 g/l |
| e) Melting point/freezing point | Melting point/range: 68 - 71 °C - lit. |
| f) Initial boiling point and boiling range | 136 - 138 °C at 13 hPa - lit. |
| g) Flash point | 152 °C - closed cup |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | No data available |
| j) Upper/lower flammability or explosive limits | Upper explosion limit: 11.9 %(V)<br>Lower explosion limit: 1.6 %(V) |
| k) Vapour pressure | 7 mmHg at 60 °C<br>< 0.01 mmHg at 20 °C |
| l) Vapour density | No data available |
| m) Relative density | 1.020 g/cm3 at 75 °C |
| n) Water solubility | soluble |
| o) Partition coefficient: n-octanol/water | log Pow: 0.12 at 25 °C |
| p) Auto-ignition temperature | No data available |
| q) Decomposition temperature | No data available |
| r) Viscosity | No data available |
| s) Explosive properties | No data available |
| t) Oxidizing properties | No data available |

### 9.2 Other safety information

| | |
|---|---|
| Bulk density | 0.50 - 0.55 g/l |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity
No data available

### 10.2 Chemical stability
Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions
No data available

### 10.4 Conditions to avoid
hygroscopic

### 10.5 Incompatible materials
Strong oxidizing agents, Strong bases

### 10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)
Other decomposition products - No data available
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - 1,210 mg/kg(ε-Caprolactam)
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Chromodacryorrhea. Behavioral:Convulsions or effect on seizure threshold. Nutritional and Gross Metabolic:Changes in:Body temperature decrease.
LC50 Inhalation - Rat - 300 mg/m3(ε-Caprolactam)
LC50 Inhalation - Mouse - 450 mg/m3(ε-Caprolactam)
Remarks: Behavioral:Muscle contraction or spasticity.
LD50 Dermal - Rat - > 2,000 mg/kg(ε-Caprolactam)

**Skin corrosion/irritation**
Skin - Rabbit(ε-Caprolactam)
Result: Mild skin irritation - 24 h

**Serious eye damage/eye irritation**
Eyes - Rabbit(ε-Caprolactam)
Result: Moderate eye irritation - 24 h
Eyes - Rabbit(ε-Caprolactam)
Result: Moderate eye irritation - 24 h

**Respiratory or skin sensitisation**

**Germ cell mutagenicity**

No data available(ε-Caprolactam)

**Carcinogenicity**
This product is or contains a component that is probably not carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.(ε-Caprolactam)
(ε-Caprolactam)

IARC: 4 - Group 4: Probably not carcinogenic to humans (ε-Caprolactam)

**Reproductive toxicity**
No data available(ε-Caprolactam)

**Specific target organ toxicity - single exposure**
May cause respiratory irritation.(ε-Caprolactam)

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available(ε-Caprolactam)

**Additional Information**
RTECS: CM3675000

Convulsions, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(ε-Caprolactam)

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 828 - 2,920 mg/l - 48 h(ε-Caprolactam) |
| Toxicity to algae | EC50 - Pseudokirchneriella subcapitata (green algae) - 4,320 - 4,800 mg/l - 72 h(ε-Caprolactam) |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available(ε-Caprolactam)

### 12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects
No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

**Contaminated packaging**
Dispose of as unused product.

## SECTION 14: Transport information

**14.1 UN number**

ADR/RID: - IMDG: - IATA: -

**14.2 UN proper shipping name**

ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

**14.3 Transport hazard class(es)**

ADR/RID: - IMDG: - IATA: -

**14.4 Packaging group**

ADR/RID: - IMDG: - IATA: -

**14.5 Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

**14.6 Special precautions for user**

No data available

## SECTION 15: Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out

## SECTION 16: Other information

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H302 + H332 | Harmful if swallowed or if inhaled |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.

# SAFETY DATA SHEET

Version 3.8
Revision Date 10/12/2015
Print Date 01/29/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Carbazole

Product Number : C5132
Brand : Sigma

CAS-No. : 86-74-8

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Carcinogenicity (Category 2), H351
Chronic aquatic toxicity (Category 4), H413

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)
H351 Suspected of causing cancer.
H413 May cause long lasting harmful effects to aquatic life.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P273 Avoid release to the environment.
P281 Use personal protective equipment as required.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $C_{12}H_9N$ |
| Molecular weight | : | 167.21 g/mol |
| CAS-No. | : | 86-74-8 |
| EC-No. | : | 201-696-0 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Carbazole** | | |
| | Carc. 2; Aquatic Chronic 4; H351, H413 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Nitrogen oxides (NOx)

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: powder<br>Colour: beige |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 243 - 246 °C (469 - 475 °F) |
| f) | Initial boiling point and boiling range | 355 °C (671 °F) |
| g) | Flash point | 220.0 °C (428.0 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | The product is not flammable. |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | 533 hPa (400 mmHg) at 323 °C (613 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 1.1 g/cm3 at 18 °C (64 °F) |
| n) | Water solubility | 0.00091 g/l at 25 °C (77 °F) |
| o) | Partition coefficient: n-octanol/water | log Pow: 3.72 at 22 °C (72 °F) |
| p) | Auto-ignition temperature | > 600 °C (> 1,112 °F) at 1,013 hPa (760 mmHg) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information
No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD0 Oral - Rat - > 16,000 mg/kg
(OECD Test Guideline 401)

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: No skin irritation
(OECD Test Guideline 404)

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: No eye irritation

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

Carcinogenicity - Mouse - male and female - Oral
hepatocellular carcinoma

Limited evidence of carcinogenicity in animal studies

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (Carbazole) |
| ACGIH: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: FE3150000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Pimephales promelas (fathead minnow) - > 0.93 mg/l - 96.0 h<br>Remarks: No toxicity at the limit of solubility |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 2.30 - 4.90 mg/l - 48 h<br>Remarks: No toxicity at the limit of solubility |
| Toxicity to algae | Growth inhibition NOEC - Scenedesmus acuminatus - > 0.4 mg/l - 96 h<br>Remarks: No toxicity at the limit of solubility |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Cyprinus carpio (Carp) - 42 d<br>- 0.05 mg/l<br><br>Bioconcentration factor (BCF): 241<br>Cyprinus carpio (Carp) - 42 d<br>- 0.005 mg/l<br><br>Bioconcentration factor (BCF): 200 |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
Not dangerous goods

**IMDG**
UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Carbazole)
Marine pollutant:yes
**IATA**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Carbazole)

**Further information**
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Chronic Health Hazard

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Carbazole | 86-74-8 | 2009-07-17 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Carbazole | 86-74-8 | 2009-07-17 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| Carbazole | 86-74-8 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H351 | Suspected of causing cancer. |
| H413 | May cause long lasting harmful effects to aquatic life. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |
| Health hazard: | 2 |
| Fire Hazard: | 1 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 3.8 Revision Date: 10/12/2015 Print Date: 01/29/2016

# SAFETY DATA SHEET

Version 5.6
Revision Date 12/10/2015
Print Date 02/09/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Carbon disulfide

Product Number : 180173
Brand : Sigma-Aldrich
Index-No. : 006-003-00-3

CAS-No. : 75-15-0

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 2), H225
Acute toxicity, Inhalation (Category 4), H332
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Reproductive toxicity (Category 2), H361
Specific target organ toxicity - repeated exposure, Inhalation (Category 1), H372
Acute aquatic toxicity (Category 2), H401

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

| | |
|---|---|
| H225 | Highly flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure if inhaled. |

| | |
|---|---|
| H401 | Toxic to aquatic life. |

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $CS_2$ |
| Molecular weight | : | 76.14 g/mol |
| CAS-No. | : | 75-15-0 |
| EC-No. | : | 200-843-6 |
| Index-No. | : | 006-003-00-3 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Carbon disulphide** | | |
| | Flam. Liq. 2; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; Repr. 2; STOT RE 1; Aquatic Acute 2; H225, H315, H319, H332, H361, H372, H401 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides, Sulphur oxides
Flash back possible over considerable distance., Container explosion may occur under fire conditions., Vapours may form explosive mixture with air., May explode when heated.

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Use explosion-proof equipment.Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Refrigerate before opening.
Storage class (TRGS 510): Flammable liquids

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Carbon disulphide | 75-15-0 | TWA | 1 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Peripheral Nervous System impairment<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen<br>Danger of cutaneous absorption | | |
| | | TWA | 1.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Peripheral Nervous System impairment<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen<br>Danger of cutaneous absorption | | |
| | | TWA | 20.000000 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.3-1968 | | |
| | | CEIL | 30.000000 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.3-1968 | | |
| | | Peak | 100.000000 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.3-1968 | | |
| | | TWA | 1.000000 ppm<br>3.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential for dermal absorption | | |
| | | ST | 10.000000 ppm<br>30.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential for dermal absorption | | |
| | | See Table Z-2 | | |
| | | TWA | 20 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.3-1968 | | |
| | | CEIL | 30 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.3-1968 | | |

| | | | | |
|---|---|---|---|---|
| | | Peak | 100 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.3-1968 | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| Carbon disulphide | 75-15-0 | 2-Thiothiazolidine-4-carboxylix acid (TTCA) | 0.5000 mg/g | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | End of shift (As soon as possible after exposure ceases) | | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid<br>Colour: colourless |
| b) | Odour | Stench. |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -112 °C (-170 °F) - lit. |
| f) | Initial boiling point and boiling range | 46 °C (115 °F) - lit. |
| g) | Flash point | -30 °C (-22 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 50 %(V)<br>Lower explosion limit: 1.3 %(V) |
| k) | Vapour pressure | 394.956 hPa (296.241 mmHg) at 20 °C (68 °F)<br>1,342.711 hPa (1,007.116 mmHg) at 55 °C (131 °F) |
| l) | Vapour density | 2.63 - (Air = 1.0) |
| m) | Relative density | 1.266 g/mL at 25 °C (77 °F) |
| n) | Water solubility | 2.9 g/l at 20 °C (68 °F) - OECD Test Guideline 105 |
| o) | Partition coefficient: n-octanol/water | log Pow: 2.7 at 25 °C (77 °F) |
| p) | Auto-ignition temperature | 97 - 107 °C (207 - 225 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information

| | |
|---|---|
| Surface tension | 71.9 mN/m at 19.5 °C (67.1 °F) |
| Relative vapour density | 2.63 - (Air = 1.0) |

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity
No data available

### 10.2 Chemical stability
Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions
Vapours may form explosive mixture with air.

### 10.4 Conditions to avoid
Heat, flames and sparks.

### 10.5 Incompatible materials
Alkali metals, Zinc, Amines, Azides, Oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - female - > 2,000 mg/kg
(OECD Test Guideline 423)

LC50 Inhalation - Rat - male and female - 4 h - 10.35 mg/l
(OECD Test Guideline 403)

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
- Mouse
Result: Does not cause skin sensitisation.
(OECD Test Guideline 429)

**Germ cell mutagenicity**
Laboratory experiments have shown mutagenic effects.

Ames test
Salmonella typhimurium
Result: negative

**Carcinogenicity**

| | |
|---|---|
| IARC: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
Suspected human reproductive toxicant

May cause reproductive disorders.

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: FF6650000

May cause convulsions.

Liver - Irregularities - Based on Human Evidence
Liver - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Poecilia reticulata (guppy) - 4 mg/l - 96 h<br>(OECD Test Guideline 203) |
| Toxicity to daphnia and other aquatic invertebrates | Immobilization EC50 - Daphnia magna (Water flea) - 2.1 mg/l - 48 h<br>(OECD Test Guideline 202) |
| Toxicity to algae | Growth inhibition EC50 - Chlorella pyrenoidosa - 21 mg/l - 96 h<br>(OECD Test Guideline 201) |

### 12.2 Persistence and degradability

Biodegradability: aerobic - Exposure time 28 d
Result: > 80 % - Readily biodegradable
(OECD Test Guideline 301D)

### 12.3 Bioaccumulative potential

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.

No data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1131 Class: 3 (6.1) Packing group: I
Proper shipping name: Carbon disulfide
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 1131 Class: 3 (6.1) Packing group: I EMS-No: F-E, S-D
Proper shipping name: CARBON DISULPHIDE

**IATA**
UN number: 1131 Class: 3 (6.1)
Proper shipping name: Carbon disulphide
IATA Passenger: Not permitted for transport
IATA Cargo: Not permitted for transport

## 15. REGULATORY INFORMATION

**SARA 302 Components**

The following components are subject to reporting levels established by SARA Title III, Section 302:

| | CAS-No. | Revision Date |
|---|---|---|
| Carbon disulphide | 75-15-0 | 2007-07-01 |

**SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Carbon disulphide | 75-15-0 | 2007-07-01 |

**SARA 311/312 Hazards**

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Carbon disulphide | 75-15-0 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Carbon disulphide | 75-15-0 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Carbon disulphide | 75-15-0 | 2007-07-01 |

**California Prop. 65 Components**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

| | CAS-No. | Revision Date |
|---|---|---|
| Carbon disulphide | 75-15-0 | 2008-06-17 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Eye Irrit. | Eye irritation |
| Flam. Liq. | Flammable liquids |
| H225 | Highly flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure if inhaled. |
| H401 | Toxic to aquatic life. |
| Repr. | Reproductive toxicity |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 3 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.6 Revision Date: 12/10/2015 Print Date: 02/09/2016

# SAFETY DATA SHEET

Version 5.10
Revision Date 01/06/2016
Print Date 03/03/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Carbon tetrachloride

Product Number : 319961
Brand : Sigma-Aldrich
Index-No. : 602-008-00-5

CAS-No. : 56-23-5

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 3), H331
Acute toxicity, Dermal (Category 3), H311
Skin sensitisation (Sub-category 1B), H317
Carcinogenicity (Category 2), H351
Specific target organ toxicity - repeated exposure, Inhalation (Category 1), Liver, Kidney, H372
Acute aquatic toxicity (Category 3), H402
Chronic aquatic toxicity (Category 3), H412
Hazardous to the ozone layer (Category 1), H420

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

| | |
|---|---|
| H301 + H311 + H331 | Toxic if swallowed, in contact with skin or if inhaled |
| H317 | May cause an allergic skin reaction. |
| H351 | Suspected of causing cancer. |
| H372 | Causes damage to organs (Liver, Kidney) through prolonged or repeated exposure if inhaled. |

| | |
|---|---|
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. |
| P302 + P352 + P312 | IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P304 + P340 + P311 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |
| P502 | Refer to manufacturer/ supplier for information on recovery/ recycling. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Rapidly absorbed through skin.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| | | |
|---|---|---|
| Synonyms | : | Tetrachloromethane |
| Formula | : | $CCl_4CCl_4$ |
| Molecular weight | : | 153.82 g/mol |
| CAS-No. | : | 56-23-5 |
| EC-No. | : | 200-262-8 |
| Index-No. | : | 602-008-00-5 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Tetrachloromethane** | | |
| | Acute Tox. 3; Skin Sens. 1B; Carc. 2; STOT RE 1; Aquatic Acute 3; Aquatic Chronic 3; Ozone 1; H301 + H311 + H331, H317, H351, H372, H412 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**

Move out of dangerous area.Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Tetrachloromethane | 56-23-5 | TWA | 5.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Liver damage<br>Suspected human carcinogen<br>Danger of cutaneous absorption | | |
| | | STEL | 10.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Liver damage<br>Suspected human carcinogen<br>Danger of cutaneous absorption | | |
| | | ST | 2.000000 ppm<br>12.600000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix A | | |
| | | TWA | 10.000000 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.17-1967 | | |
| | | CEIL | 25.000000 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.17-1967 | | |
| | | Peak | 200.000000 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.17-1967 | | |
| | | See Table Z-2 | | |
| | | TWA | 5 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Liver damage<br>Suspected human carcinogen<br>Danger of cutaneous absorption | | |
| | | STEL | 10 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Liver damage<br>Suspected human carcinogen<br>Danger of cutaneous absorption | | |
| | | ST | 2 ppm<br>12.6 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix A | | |
| | | See Table Z-2 | | |
| | | TWA | 10 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.17-1967 | | |
| | | CEIL | 25 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.17-1967 | | |
| | | Peak | 200 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.17-1967 | | |
| | | TWA | 2 ppm<br>12.6 mg/m3 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |

## 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 240 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid<br>Colour: colourless |
| b) | Odour | sweet |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -23 °C (-9 °F) - lit. |
| f) | Initial boiling point and boiling range | 76 - 77 °C (169 - 171 °F) - lit. |
| g) | Flash point | does not flash |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower | No data available |

| | | |
|---|---|---|
| | flammability or explosive limits | |
| k) | Vapour pressure | 45 hPa (34 mmHg) at 0.3 °C (32.5 °F)<br>120 hPa (90 mmHg) at 19.8 °C (67.6 °F)<br>14,549 hPa (10,913 mmHg) at 24 °C (75 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 1.594 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | 0.8461 g/l at 20 °C (68 °F) |
| o) | Partition coefficient: n-octanol/water | log Pow: 2.83 at 25 °C (77 °F) |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**

| | |
|---|---|
| Surface tension | 26.7 mN/m at 20 °C (68 °F)<br>19.5 mN/m at 80 °C (176 °F) |

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 2,350 mg/kg

LC50 Inhalation - Rat - 4 h - 8000 ppm

LD50 Dermal - Rabbit - > 20,000 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Mild skin irritation - 24 h
(Draize Test)

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Mild eye irritation - 24 h
(Draize Test)

**Respiratory or skin sensitisation**
- Mouse
Result: The product is a skin sensitiser, sub-category 1B.
(OECD Test Guideline 429)

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Limited evidence of carcinogenicity in animal studies

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (Tetrachloromethane) |
| NTP: | Reasonably anticipated to be a human carcinogen (Tetrachloromethane) |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
Inhalation - Causes damage to organs through prolonged or repeated exposure. - Liver, Kidney

**Aspiration hazard**
No data available

**Additional Information**
RTECS: FG4900000

Vomiting, Diarrhoea, Abdominal pain, Nausea, Dizziness, Headache, Damage to the eyes., Liver injury may occur., Kidney injury may occur., Exposure to and/or consumption of alcohol may increase toxic effects., Contact with skin can cause:, Pain, Erythema, hyperemia

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | mortality LC50 - Danio rerio (zebra fish) - 24.3 mg/l - 96 h |
| Toxicity to daphnia and other aquatic invertebrates | Immobilization EC50 - Daphnia magna (Water flea) - 35 mg/l - 48 h<br>(OECD Test Guideline 202) |
| Toxicity to algae | Growth inhibition EC50 - Algae - 20 mg/l - 72 h<br>(OECD Test Guideline 201) |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Lepomis macrochirus (Bluegill) - 21 d<br>- 52.3 µg/l |
| | Bioconcentration factor (BCF): 30 |

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1846 Class: 6.1 Packing group: II
Proper shipping name: Carbon tetrachloride
Reportable Quantity (RQ): 10 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 1846 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: CARBON TETRACHLORIDE
Marine pollutant: yes

**IATA**
UN number: 1846 Class: 6.1 Packing group: II
Proper shipping name: Carbon tetrachloride

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Tetrachloromethane | 56-23-5 | 2007-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Tetrachloromethane | 56-23-5 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Tetrachloromethane | 56-23-5 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Tetrachloromethane | 56-23-5 | 2007-07-01 |

**California Prop. 65 Components**

| | CAS-No. | Revision Date |
|---|---|---|
| WARNING! This product contains a chemical known to the State of California to cause cancer. | 56-23-5 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H301 | Toxic if swallowed. |
| H301 + H311 + H331 | Toxic if swallowed, in contact with skin or if inhaled |
| H311 | Toxic in contact with skin. |
| H317 | May cause an allergic skin reaction. |
| H331 | Toxic if inhaled. |
| H351 | Suspected of causing cancer. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.10 Revision Date: 01/06/2016 Print Date: 03/03/2016

# SAFETY DATA SHEET

Version 6.4
Revision Date 03/08/2024
Print Date 05/12/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Chlorobenzene-$^{13}C_6$

Product Number : 488534
Brand : Aldrich
Index-No. : 602-033-00-1
CAS-No. : 287389-52-0

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable liquids (Category 3), H226
Acute toxicity, Inhalation (Category 4), H332
Short-term (acute) aquatic hazard (Category 2), H401
Long-term (chronic) aquatic hazard (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements



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Pictogram



Signal Word Warning

Hazard Statements

| | |
|---|---|
| H226 | Flammable liquid and vapor. |
| H332 | Harmful if inhaled. |
| H411 | Toxic to aquatic life with long lasting effects. |

Precautionary Statements

| | |
|---|---|
| P210 | Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing mist or vapors. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P391 | Collect spillage. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## SECTION 3: Composition/information on ingredients

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $^{13}C_6H_5Cl$ |
| Molecular weight | : | 118.45 g/mol |
| CAS-No. | : | 287389-52-0 |
| Index-No. | : | 602-033-00-1 |

| Component | Classification | Concentration |
|---|---|---|
| **Chlorobenzene-13C6** | | |
| | Flam. Liq. 3; Acute Tox. 4; Aquatic Acute 2; Aquatic Chronic 2; H226, H332, H401, H411 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.



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## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. If breathing stops: mouth-to-mouth breathing or artificial respiration. Oxygen if necessary. Immediately call in physician.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Remove contact lenses.

**If swallowed**
After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Water Foam Carbon dioxide (CO2) Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides
Hydrogen chloride gas
Combustible.
Vapors are heavier than air and may spread along floors.
Forms explosive mixtures with air at elevated temperatures.
Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.



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### 5.4 Further information

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.
Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb® ). Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

**Advice on protection against fire and explosion**
Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.

**Hygiene measures**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

**Storage class**
Storage class (TRGS 510): 3: Flammable liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated



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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Chlorobenzene-13C6 | 287389-52-0 | TWA | 10 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Confirmed animal carcinogen with unknown relevance to humans | | |
| | | TWA | 75 ppm<br>350 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | PEL | 10 ppm<br>46 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| Chlorobenzene-13C6 | 287389-52-0 | 4-Chlorocatechol | 100mg/g creatinine | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | End of shift at end of workweek | | | |
| | | p-Chlorophenol | 20mg/g creatinine | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | | End of shift at end of workweek | | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
required

**Body Protection**
Flame retardant antistatic protective clothing.

**Respiratory protection**
Recommended Filter type: Filter type ABEK



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The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when vapours/aerosols are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains. Risk of explosion.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -45 °C (-49 °F) - lit. |
| f) | Initial boiling point and boiling range | 132 °C 270 °F - lit. |
| g) | Flash point | 23.9 °C (75.0 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | No data available |
| l) | Vapor density | No data available |
| m) | Density | 1.164 g/mL at 25 °C (77 °F)1.164 g/cm3 at 25 °C (77 °F) |
| | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 5.0 |
| p) | Autoignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |



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s) Explosive properties No data available

t) Oxidizing properties No data available

**9.2 Other safety information**
No data available

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
Vapor/air-mixtures are explosive at intense warming.

**10.2 Chemical stability**
The product is chemically stable under standard ambient conditions (room temperature) .

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
Heating.

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
In the event of fire: see section 5

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Acute toxicity**
Oral: No data available
LC50 Inhalation - 4.0 h - 11.0 mg/l - vapor

Inhalation: No data available
Dermal: No data available

**Skin corrosion/irritation**
Remarks: No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.



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NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

Incoordination., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

## SECTION 12: Ecological information

### 12.1 Toxicity
No data available

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties
No data available

### 12.7 Other adverse effects
No data available



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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

## SECTION 14: Transport information

**DOT (US)**
UN number: 1134 Class: 3 Packing group: III
Proper shipping name: Chlorobenzene
Reportable Quantity (RQ): 100 lbs
Reportable Quantity (RQ): 100 lbs
Poison Inhalation Hazard: No

**IMDG**
UN number: 1134 Class: 3 Packing group: III EMS-No: F-E, S-D
Proper shipping name: CHLOROBENZENE
Marine pollutant : yes

**IATA**
UN number: 1134 Class: 3 Packing group: III
Proper shipping name: Chlorobenzene

## SECTION 15: Regulatory information

**SARA 302 Components**
This material does not contain any components with a section 302 EHS TPQ.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Chlorobenzene-13C6 | 287389-52-0 | 2007-07-01 |

**SARA 311/312 Hazards**
Fire Hazard, Chronic Health Hazard

**Reportable Quantity** : D021 lbs

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Chlorobenzene-13C6 | 287389-52-0 | 2007-07-01 |



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## SECTION 16: Other information

### Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 6.4 Revision Date: 03/08/2024 Print Date: 05/12/2024



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# SAFETY DATA SHEET

Version 6.11
Revision Date 09/06/2024
Print Date 09/07/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Chloroform

Product Number : 288306
Brand : Sigma-Aldrich
Index-No. : 602-006-00-4
CAS-No. : 67-66-3

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 3), H331
Skin irritation (Category 2), H315



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Eye irritation (Category 2A), H319
Carcinogenicity (Category 2), H351
Reproductive toxicity (Category 2), H361
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
Specific target organ toxicity - repeated exposure, Oral (Category 1), Liver, Kidney, H372
Short-term (acute) aquatic hazard (Category 3), H402

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word: Danger

Hazard Statements

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H331 | Toxic if inhaled. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H372 | Causes damage to organs (Liver, Kidney) through prolonged or repeated exposure if swallowed. |
| H402 | Harmful to aquatic life. |

Precautionary Statements

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe mist or vapors. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P312 + P330 | IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 + P311 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal |



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plant.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : Trichloromethane
Methylidyne trichloride

Formula : $CHCl_3$
Molecular weight : 119.38 g/mol
CAS-No. : 67-66-3
EC-No. : 200-663-8
Index-No. : 602-006-00-4

| Component | Classification | Concentration |
|---|---|---|
| **Chloroform** | | |
| | Acute Tox. 4; Acute Tox. 3; Skin Irrit. 2; Eye Irrit. 2A; Carc. 2; Repr. 2; STOT SE 3; STOT RE 1; Aquatic Acute 3; H302, H331, H315, H319, H351, H361, H336, H372, H402<br>Concentration limits:<br>20 %: STOT SE 3, H336; | <= 100 % |

| | | |
|---|---|---|
| **ethanol** | | |
| | Flam. Liq. 2; Eye Irrit. 2A; H225, H319<br>Concentration limits:<br>>= 50 %: Eye Irrit. 2A, H319; | >= 1 - < 5 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.



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**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

**If swallowed**
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## SECTION 5: Firefighting measures

**5.1 Extinguishing media**

**Suitable extinguishing media**
Water Foam Carbon dioxide (CO2) Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides
Hydrogen chloride gas
Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

**5.3 Advice for firefighters**
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

**5.4 Further information**
Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**
Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

**6.2 Environmental precautions**
Do not let product enter drains.



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### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

**Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

**Storage class**

Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Chloroform | 67-66-3 | TWA | 10 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Confirmed animal carcinogen with unknown relevance to humans | | |
| | | ST | 2 ppm<br>9.78 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen | | |



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| | | | | |
|---|---|---|---|---|
| | | C | 50 ppm<br>240 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | PEL | 2 ppm<br>9.78 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
| ethanol | 64-17-5 | TWA | 1,000 ppm<br>1,900 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | STEL | 1,000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Confirmed animal carcinogen with unknown relevance to humans | | |
| | | TWA | 1,000 ppm<br>1,900 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | PEL | 1,000 ppm<br>1,900 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |

## 8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: Viton®
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: butyl-rubber
Minimum layer thickness: 0.7 mm
Break through time: 10 min



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Material tested:Butoject® (KCL 898)

**Body Protection**
protective clothing

**Respiratory protection**
Recommended Filter type: Filter type AX
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when vapours/aerosols are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid, clear<br>Color: colorless |
| b) | Odor | sweet |
| c) | Odor Threshold | 205 ppm |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point: -64 °C (-83 °F) |
| f) | Initial boiling point and boiling range | 60.5 - 61.5 °C 140.9 - 142.7 °F at 1,013.25 hPa |
| g) | Flash point | () - Regulation (EC) No. 440/2008, Annex, A.9does not flash |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | 210 hPa at 20 °C (68 °F) |
| l) | Vapor density | 4.12 - (Air = 1.0) |
| m) | Density | 1.49 g/cm3 at 25 °C (77 °F) |
| | Relative density | No data available |
| n) | Water solubility | 8.7 g/l at 23 °C (73 °F) - OECD Test Guideline 105 - soluble |
| o) | Partition coefficient: n-octanol/water | No data available |



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| | | |
|---|---|---|
| p) | Autoignition temperature | No data available |
| q) | Decomposition temperature | Distillable in an undecomposed state at normal pressure. |
| r) | Viscosity | No data available |
| s) | Explosive properties | Not classified as explosive. |
| t) | Oxidizing properties | none |

**9.2 Other safety information**

| | |
|---|---|
| Solubility in other solvents | organic solvent at 20 °C (68 °F) - miscible |
| Relative vapor density | 4.12 - (Air = 1.0) |

## SECTION 10: Stability and reactivity

**10.1 Reactivity**

No data available

**10.2 Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .
Contains the following stabilizer(s):
ethanol (>=0.5 - <=1 %)

**10.3 Possibility of hazardous reactions**

Risk of explosion with:
Ammonia
Amines
nitrogen oxides
bases
Oxygen
alkali amides
organic nitro compounds
strong alkalis
Fluorine
peroxi compounds
Alkaline earth metals
Alkali metals
Powdered metals
Methanol
with
alcoholates
Methanol
with
strong alkalis
Iron
in powder form
various alloys



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sensitive to shock
Methanol
with
Sodium hydroxide
magnesium
in powder form
Oxygen
with
alkali compounds
Aluminum
in powder form
Acetone
with
alkali compounds
Potassium
sensitive to shock
sodium
sensitive to shock
Violent reactions possible with:
phosphines
bis(dimethylamino)dimethyl tin
nonmetallic hydrogen compounds
Powdered metals
Light metals
Ketones
mineral acids
Strong oxidizing agents
semimetallic hydrogen compounds

### 10.4 Conditions to avoid
no information available

### 10.5 Incompatible materials
No data available

### 10.6 Hazardous decomposition products
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
Acute toxicity estimate Oral - 912.56 mg/kg
(Calculation method)
LD50 Oral - Rat - male - 908 mg/kg
(OECD Test Guideline 401)
Acute toxicity estimate Inhalation - 4 h - 3.12 mg/l - vapor(Calculation method)

LC50 Inhalation - Rat - 6 h - 9.17 mg/l - vapor



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Acute toxicity estimate Inhalation - Expert judgment - 4 h - 3.1 mg/l - vapor

Dermal: No data available
No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Irritating to skin. - 24 h
Remarks: (ECHA)
Remarks: Drying-out effect resulting in rough and chapped skin.
Skin - Rabbit
Result: slight irritation
Remarks: (IUCLID)

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Irritating to eyes.
Remarks: (ECHA)
Remarks: (Regulation (EC) No 1272/2008, Annex VI)

**Respiratory or skin sensitization**
Maximization Test - Guinea pig
Result: negative
(Regulation (EC) No. 440/2008, Annex, B.6)

**Germ cell mutagenicity**
Test Type: Ames test
Test system: Escherichia coli/Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Result: negative
Remarks: (ECHA)
Test Type: unscheduled DNA synthesis assay
Test system: Liver
Metabolic activation: without metabolic activation
Result: negative
Remarks: (ECHA)

Test Type: Micronucleus test
Species: Rat
Cell type: Red blood cells (erythrocytes)
Application Route: Oral
Method: OECD Test Guideline 474
Result: negative

Test Type: unscheduled DNA synthesis assay
Species: Rat
Cell type: Liver cells
Application Route: Oral
Method: OECD Test Guideline 486
Result: negative

Test Type: in vivo assay
Species: Mouse



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Application Route: Inhalation

Result: negative
Remarks: (ECHA)

**Carcinogenicity**
Suspected of causing cancer.

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Chloroform)

NTP: RAHC - Reasonably anticipated to be a human carcinogen (Chloroform)

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
Suspected of damaging the unborn child.

**Specific target organ toxicity - single exposure**
May cause drowsiness or dizziness.

**Specific target organ toxicity - repeated exposure**
Oral - Causes damage to organs through prolonged or repeated exposure.
- Liver, Kidney

**Aspiration hazard**
No data available

### 11.2 Additional Information

Repeated dose toxicity - Rat - female - Oral - NOAEL (No observed adverse effect level) - 34 mg/kg

Vomiting, Cough, irritant effects, Shortness of breath, respiratory arrest, narcosis, Dizziness, Nausea, agitation, spasms, inebriation, Headache, Stomach/intestinal disorders, ataxia (impaired locomotor coordination), cardiovascular disorders
Drying-out effect resulting in rough and chapped skin.
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Crassostrea gigas - 152.5 mg/l - 48 h<br>Remarks: (ECHA) |
| Toxicity to algae | static test ErC50 - Chlamydomonas reinhardtii (green algae) - 13.3 mg/l - 72 h<br>Remarks: (ECHA) |



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| | |
|---|---|
| Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) | semi-static test NOEC - Daphnia magna (Water flea) - 6.3 mg/l - 21 d<br>Remarks: (ECHA) |

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Endocrine disrupting properties**
No data available

**12.7 Other adverse effects**
No data available

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

**Product**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**
UN number: 1888 Class: 6.1 Packing group: III
Proper shipping name: ChloroformSOLUTION

Reportable Quantity (RQ): 10 lbs
Reportable Quantity (RQ): 10 lbs
Poison Inhalation Hazard: No

**IMDG**
UN number: 1888 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: CHLOROFORMSOLUTION



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**IATA**
UN number: 1888 Class: 6.1 Packing group: III
Proper shipping name: ChloroformSOLUTION

## SECTION 15: Regulatory information

### CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| Chloroform | 67-66-3 | 10 | 10 |
| Chloroform | 67-66-3 | 10 | 10 (D022) |

### SARA 304 Extremely Hazardous Substances Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| Chloroform | 67-66-3 | 10 | 10 |

### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

| Components | CAS-No. | Component TPQ (lbs) |
|---|---|---|
| Chloroform | 67-66-3 | 10000 |

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

Chloroform 67-66-3 >= 90 - <= 100 %

### US State Regulations

**Massachusetts Right To Know**

Chloroform 67-66-3
ethanol 64-17-5

**Pennsylvania Right To Know**

Chloroform 67-66-3
ethanol 64-17-5

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

**Washington Chemicals of High Concern**

Product does not contain any listed chemicals

**California Prop. 65**

WARNING: This product can expose you to chemicals including Chloroform, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory



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**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16: Other information

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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# SAFETY DATA SHEET

Based on Directive 2001/58/EC of the Commission of the European Communities

# CHRYSENE

## 1. Identification of the substance/preparation and of the company/undertaking

**1.1 Identification of the substance or preparation:**

**Synonyms:** none
**CAS No.** : 218-01-9
**EC index No.** : 601-048-00-0
**EINECS No.** : 205-923-4
**RTECS No.** : GC0700000
**BCR number** : BCR-269
**NFPA code** : N.D.
**Molecular weight** : 228.30
**Formula** : C18H12

**1.2 Use of the substance or the preparation:**
Certified reference material for laboratory use only

**1.3 Company/undertaking identification:**
Institute for Reference Materials and Measurements
Retieseweg
B-2440 Geel
Tel. : +32 14 57 12 11
Fax : +32 14 58 42 73

**1.4 Telephone number for emergency:**
+32 70 245 245
Antigifcentrum
p/a Militair Hospitaal Koningin Astrid, Bruynstraat, B-1120 Brussel

## 2. Composition/information on ingredients

| Hazardous ingredients | CAS No.<br>EINECS No. | Conc. in % | Hazard symbol | Risks (R-phrases) |
|---|---|---|---|---|
| chrysene | 218-01-9<br>205-923-4 | 100 | T;N | 45-50/53 (1) |

(1) For R-phrases in full: see heading 16

## 3. Hazards identification

- May cause cancer
- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

## 4. First aid measures

**4.1 Eye contact:**
- Consult a doctor/medical service if irritation persists
- Rinse immediately with water

**4.2 Skin contact:**
- Consult a doctor/medical service if irritation persists
- Wash with water and soap
- Wipe off dry product from skin
- Remove clothing before washing

**4.3 After inhalation:**
- Consult a doctor/medical service if breathing problems develop
- Remove the victim into fresh air
- Unconscious: maintain adequate airway and respiration

**4.4 After ingestion:**
- Consult a doctor/medical service if you feel unwell
- Immediately give lots of water to drink
- Never give water to an unconscious person

- Do not induce vomiting

## 5. Fire-fighting measures

**5.1 Suitable extinguishing media:**
- Water spray
- Alcohol foam
- Polymer foam
- ABC powder
- Carbon dioxide

**5.2 Unsuitable extinguishing media:**
- Solid water jet ineffective as extinguishing medium

**5.3 Special exposure hazards:**
- Not easily combustible
- Upon combustion CO and CO2 are formed

**5.4 Instructions:**
- Take account of toxic firefighting water
- Use firefighting water moderately and contain it

**5.5 Special protective equipment for firefighters:**
- Heat/fire exposure: compressed air/oxygen apparatus
- Dust cloud production: compressed air/oxygen apparatus

## 6. Accidental release measures

**6.1 Personal protection/precautions:** see heading 8.1/8.3/10.3

**6.2 Environmental precautions:**
- Prevent soil and water pollution
- Substance must not be discharged into the sewer
- Dam up the solid spill

**6.3 Methods for cleaning up:**
- Stop dust cloud by covering with sand/earth
- Carefully collect the spill/leftovers
- Scoop solid spill into closing containers
- Spill must not return in its original container
- Take collected spill to manufacturer/competent authority
- Clean contaminated surfaces with an excess of water
- Wash clothing and equipment after handling

## 7. Handling and storage

**7.1 Handling:**
- Observe strict hygiene
- Avoid prolonged and repeated contact with skin
- Avoid raising dust
- Do not discharge the waste into the drain
- Remove contaminated clothing immediately

**7.2 Storage:**
- Keep container tightly closed. Store only in a limited quantity. Store in a dry area. Store in a dark area.
- Keep away from: heat sources, ignition sources, oxidizing agents, acids

| | | | |
|---|---|---|---|
| **Storage temperature** | : | N.D. | **°C** |
| **Quantity limits** | : | N.D. | **kg** |
| **Storage life** | : | N.D. | |
| **Materials for packaging** | : | | |

- suitable : no data available
- to avoid : no data available

**7.3 Specific uses:**
- See information supplied by the manufacturer

## 8. Exposure controls/Personal protection

**8.1 Exposure limit values:**

| | | |
|---|---|---|
| **TLV-TWA** | : | not listed |
| **TLV-STEL** | : | not listed |
| **TLV-Ceiling** | : | not listed |
| **OES-LTEL** | : | not listed |
| **OES-STEL** | : | not listed |
| **MEL-LTEL** | : | not listed |
| **MEL-STEL** | : | not listed |
| **MAK** | : | not listed |
| **TRK** | : | not listed |
| **MAC-TGG 8 h** | : | not listed |
| **MAC-TGG 15 min.** | : | not listed |
| **MAC-Ceiling** | : | not listed |
| **VME-8 h** | : | not listed |
| **VLE-15 min.** | : | not listed |
| **GWBB-8 h** | : | not listed |
| **GWK-15 min.** | : | not listed |
| **Momentary value** | : | not listed |
| **EC** | : | not listed |
| **EC-STEL** | : | not listed |

**Sampling methods:**

| | |
|---|---|
| - Chrysene (Polynuclear aromatic Hydrocarbons) | NIOSH 5515 |
| - Chrysene | OSHA 58 |
| - Chrysene (Polynuclear aromatic Hydrocarbons) | NIOSH 5506 |

**8.2 Exposure controls:**

**8.2.1 Occupational exposure controls:**
- Measure the concentration in the air regularly
- Work under local exhaust/ventilation

**8.2.2 Environmental exposure controls:** see heading 13

**8.3 Personal protection:**

**8.3.1 respiratory protection:**
- Dust production: dust mask with filter type P3
- High dust production: compressed air/oxygen apparatus

**8.3.2 hand protection:**
- Gloves
  Suitable materials: No data available

- Breakthrough time: N.D.

**8.3.3 eye protection:**
- Safety glasses
- In case of dust production: protective goggles

**8.3.4 skin protection:**
- Protective clothing
- In case of dust production: head/neck protection
  Suitable materials: No data available

## 9. Physical and chemical properties

### 9.1 General information:

| | | |
|---|---|---|
| Appearance (at 20°C) | : | Crystalline solid / Flakes |
| Odour | : | Odourless |
| Colour | : | White |

### 9.2 Important health, safety and environmental information:

| | | | |
|---|---|---|---|
| pH value | : | N.D. | |
| Boiling point/boiling range | : | 448 | **°C** |
| Flashpoint | : | N.D. | **°C** |
| Explosion limits | : | N.D. | **vol%** ( **°C**) |
| Vapour pressure (at 20°C) | : | N.D. | **hPa** |
| Vapour pressure (at 50°C) | : | N.D. | **hPa** |
| Relative density (at 20°C) | : | 1.27 | |
| Water solubility | : | < 0.001 | **g/100 ml** |
| Soluble in | : | N.D. | |
| Relative vapour density | : | N.D. | |
| Viscosity | : | N.D. | **Pa.s** |
| Partition coëfficient n-octanol/water | : | 5.61/5.73 | |
| Evaporation rate | | | |
| ratio to butyl acetate | : | N.D. | |
| ratio to ether | : | N.D. | |

### 9.3 Other information:

| | | | |
|---|---|---|---|
| Melting point/melting range | : | 256 | **°C** |
| Auto-ignition point | : | N.D. | **°C** |
| Saturation concentration | : | N.D. | **g/m$^3$** |

## 10. Stability and reactivity

**10.1 Conditions to avoid/reactivity:**
- Stable under normal conditions

**10.2 Materials to avoid:**
- Keep away from: heat sources, ignition sources, oxidizing agents, acids

**10.3 Hazardous decomposition products:**
- Upon combustion CO and CO2 are formed
- Reacts violently with (strong) oxidizers
- Decomposes on exposure to (strong) acids

## 11. Toxicological information

### 11.1 Acute toxicity:

| | | | |
|---|---|---|---|
| **LD50 oral rat** | : | N.D. | **mg/kg** |
| **LD50 dermal rat** | : | N.D. | **mg/kg** |
| **LD50 dermal rabbit** | : | N.D. | **mg/kg** |
| **LC50 inhalation rat** | : | N.D. | **mg/1/4 h** |
| **LC50 inhalation rat** | : | N.D. | **ppm/4 h** |

**11.2 Chronic toxicity:**

| | | |
|---|---|---|
| **EC carc. cat.** | : | 2 |
| **EC muta. cat.** | : | 3 |
| **EC repr. cat.** | : | not listed |
| **Carcinogenicity (TLV)** | : | A3 |
| **Carcinogenicity (MAC)** | : | K |
| **Carcinogenicity (VME)** | : | not listed |
| **Carcinogenicity (GWBB)** | : | not listed |
| **Carcinogenicity (MAK)** | : | 2 |
| **Mutagenicity (MAK)** | : | not listed |
| **Teratogenicity (MAK)** | : | - |
| **IARC classification** | : | 3 |

**11.3 Routes of exposure:** ingestion, inhalation, eyes and skin
Caution! Substance is absorbed through the skin

**11.4 Acute effects/symptoms:**

**AFTER SKIN CONTACT**
- Slight irritation

**11.5 Chronic effects:**

- Probably human carcinogenic
- No certainty about human mutagenic properties

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:
- No specific information available

SIMILAR PRODUCTS CAUSE FOLLOWING SYMPTOMS:
- Feeling of weakness
- Photoallergy
- Cracking of the skin
- Skin rash/inflammation
- Skin cancer
- Lung tissue affection/degeneration
- Enlargement/affection of the liver
- Affection of the renal tissue

## 12. Ecological information

**12.1 Ecotoxicity:**

- LC50 (24 h) : 0.0007 mg/l (DAPHNIA MAGNA)
- LC50 (24 h) : >6.7 mg/l (RANA SP.)

**12.2 Mobility:**

- **Volatile organic compounds (VOC):** N.D.%

- Forming sediments in water
- Adsorbs into the soil
- Insoluble in water

For other physicochemical properties see heading 9.

**12.3 Persistence and degradability:**

- **biodegradation $BOD_5$** : N.D. **% ThOD**
- **water** : - Not readily biodegradable in water
- **soil** : **T ½:** > 77 **days**

**12.4 Bioaccumulative potential:**
- **log $P_{ow}$** : 5.61/5.73
- **BCF** : 4440 (LAMELLIBRANCHIATA)
- Highly bioaccumulative

**12.5 Other adverse effects:**

- **WGK** : 3 (Classification based on the R-phrases in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 17 May 1999)
- **Effect on the ozone layer** : Not dangerous for the ozone layer (Council Regulation (EC) 3093/94)
- **Greenhouse effect** : no data available
- **Effect on waste water purification** : no data available

## 13. Disposal considerations

**13.1 Provisions relating to waste:**

- Waste material code (91/689/EEC, Council Decision
- 2001/118/EC, O.J. L47 of 16/2/2001): 16 05 06 (laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory)
- Waste material code (Flanders): 001, 045, 691
- Waste code (Germany): 59302
- Hazardous waste (91/689/EEC)

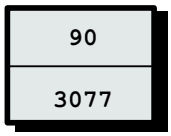
**13.2 Disposal methods:**

- Dissolve or mix with a combustible solvent
- Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber
- Do not discharge into surface water (2000/60/EEC, Council

**13.3 Packaging/Container:**

- Waste material code packaging (91/689/EEC, Council Decision
- 2001/118/EC, O.J. L47 of 16/2/2001): 15 01 10 (packaging containing residues of or contaminated by dangerous substances)

## 14. Transport information




**14.1 Classification of the substance in compliance with UN Recommendations**

| | |
|---|---|
| **UN number** | : 3077 |
| **CLASS** | : 9 |
| **SUB RISKS** | : - |
| **PACKING** | : III |
| **PROPER SHIPPING NAME** | : UN 3077, Environmentally hazardous substance, solid, n.o.s. (chrysene) |

**14.2 ADR (transport by road)**

| | |
|---|---|
| **CLASS** | : 9 |
| **PACKING** | : III |
| **DANGER LABEL TANKS** | : 9 |
| **DANGER LABEL PACKAGES** | : 9 |

**14.3 RID (transport by rail)**

| | |
|---|---|
| **CLASS** | : 9 |
| **PACKING** | : III |
| **DANGER LABEL TANKS** | : 9 |
| **DANGER LABEL PACKAGES** | : 9 |

**14.4 ADNR (transport by inland waterways)**

| | |
|---|---|
| **CLASS** | : 9 |
| **PACKING** | : III |
| **DANGER LABEL TANKS** | : 9 |
| **DANGER LABEL PACKAGES** | : 9 |

**14.5 IMDG (maritime transport)**

| | |
|---|---|
| **CLASS** | : 9 |
| **SUB RISKS** | : - |
| **PACKING** | : III |
| **MFAG** | : - |
| **EMS** | : - |
| **MARINE POLLUTANT** | : P |

**14.6 ICAO (air transport)**

| | |
|---|---|
| **CLASS** | : 9 |
| **SUB RISKS** | : - |
| **PACKING** | : III |
| **PACKING INSTRUCTIONS PASSENGER AIRCRAFT** | : |
| **PACKING INSTRUCTIONS CARGO AIRCRAFT** | : |

**14.7 Special precautions in connection with transport** : none

**14.8 Limited quantities (LQ)** :

When substances and their packaging meet the conditions established by ADR/RID/ADNR in chapter 3.4, **only** the following prescriptions shall be complied with:
each package shall display a diamond-shaped figure with the following inscription:
- 'UN 3077'
or, in the case of different goods with different identification numbers within a single package:
- the letters 'LQ'

## 15. Regulatory information

Enumerated in substance list Annex I of directive 67/548/EEC et sequens



Toxic



Dangerous for the environment

R45 : May cause cancer
R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S53 : Avoid exposure - obtain special instructions before use
S45 : In case of accident or if you feel unwell, seek medical advice (show the label where possible)
S60 : This material and/or its container must be disposed of as hazardous waste
S61 : Avoid release to the environment. Refer to special instructions/safety data sheets.

## 16. Other information

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**N.A.** = NOT APPLICABLE
**N.D.** = NOT DETERMINED
***** = INTERNAL CLASSIFICATION

**Full text of any R-phrases referred to under heading 2:**

R45 : May cause cancer
R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

**Exposure limits:**
**TLV** : Threshold Limit Value - ACGIH USA 2000
**OES** : Occupational Exposure Standards - United Kingdom 1999
**MEL** : Maximum Exposure Limits - United Kingdom 1999
**MAK** : Maximale Arbeitsplatzkonzentrationen - Germany 2001
**TRK** : Technische Richtkonzentrationen - Germany 2001
**MAC** : Maximale aanvaarde concentratie - The Netherlands 2002
**VME** : Valeurs limites de Moyenne d'Exposition - France 1999
**VLE** : Valeurs limites d'Exposition à court terme - France 1999
**GWBB** : Grenswaarde beroepsmatige blootstelling - Belgium 1998
**GWK** : Grenswaarde kortstondige blootstelling - Belgium 1998
**EC** : Indicative occupational exposure limit values - directive 2000/39/EC

**Chronic toxicity:**
**K** : List of the carcinogenic substances and processes - The Netherlands 2002

# SAFETY DATA SHEET

Version 5.4
Revision Date 12/01/2015
Print Date 03/03/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : *cis*-1,2-Dichloroethylene

Product Number : D62004
Brand : Aldrich
Index-No. : 602-026-00-3

CAS-No. : 156-59-2

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 2), H225
Acute toxicity, Inhalation (Category 4), H332
Acute aquatic toxicity (Category 3), H402
Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H225 Highly flammable liquid and vapour.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.

| | |
|---|---|
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P312 | Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Synonyms | : | cis-Acetylene dichloride |
| Formula | : | $C_2H_2Cl_2$ |
| Molecular weight | : | 96.94 g/mol |
| CAS-No. | : | 156-59-2 |
| EC-No. | : | 205-859-7 |
| Index-No. | : | 602-026-00-3 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **cis-Dichloroethylene** | | |
| | Flam. Liq. 2; Acute Tox. 4; Aquatic Acute 3; Aquatic Chronic 3; H225, H332, H412 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides, Hydrogen chloride gas

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Use explosion-proof equipment.Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Handle and store under inert gas. Air and moisture sensitive. Light sensitive.

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| cis-Dichloroethylene | 156-59-2 | TWA | 200 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Central Nervous System impairment<br>Eye irritation | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**
Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid<br>Colour: light yellow |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -80 °C (-112 °F) - lit. |
| f) | Initial boiling point and boiling range | 60 °C (140 °F) - lit. |
| g) | Flash point | 6.0 °C (42.8 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 1.284 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |

| | | |
|---|---|---|
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
Vapours may form explosive mixture with air.

**10.4 Conditions to avoid**
Heat, flames and sparks. Extremes of temperature and direct sunlight.

**10.5 Incompatible materials**
Oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LC50 Inhalation - Rat - 13700 ppm
Remarks: Behavioral:Somnolence (general depressed activity). Liver:Fatty liver degeneration.

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

| | |
|---|---|
| IARC: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: KV9420000

narcosis, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**
No data available

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1150 Class: 3 Packing group: II
Proper shipping name: 1,2-Dichloroethylene

Poison Inhalation Hazard: No

**IMDG**
UN number: 1150 Class: 3 Packing group: II EMS-No: F-E, S-D
Proper shipping name: 1,2-DICHLOROETHYLENE

**IATA**
UN number: 1150 Class: 3 Packing group: II
Proper shipping name: 1,2-Dichloroethylene

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Fire Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| cis-Dichloroethylene | 156-59-2 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| cis-Dichloroethylene | 156-59-2 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| cis-Dichloroethylene | 156-59-2 | 1993-04-24 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Flam. Liq. | Flammable liquids |
| H225 | Highly flammable liquid and vapour. |
| H332 | Harmful if inhaled. |
| H402 | Harmful to aquatic life. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 1 |
| Chronic Health Hazard: | * |
| Flammability: | 3 |
| Physical Hazard | 1 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 0 |

**Further information**
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**
Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.4 Revision Date: 12/01/2015 Print Date: 03/03/2016

# SAFETY DATA SHEET

Version 6.12
Revision Date 09/08/2024
Print Date 09/09/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Cobalt

Product Number : 266647
Brand : Aldrich
Index-No. : 027-001-00-9
CAS-No. : 7440-48-4

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable solids (Category 1), H228
Eye irritation (Category 2A), H319
Respiratory sensitization (Category 1), H334



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operates as MilliporeSigma in the US and Canada

Skin sensitization (Category 1), H317
Germ cell mutagenicity (Category 2), H341
Carcinogenicity (Category 1B), H350
Reproductive toxicity (Category 1B), H360
Long-term (chronic) aquatic hazard (Category 4), H413

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word: Danger

Hazard Statements

| | |
|---|---|
| H228 | Flammable solid. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H341 | Suspected of causing genetic defects. |
| H350 | May cause cancer. |
| H360 | May damage fertility or the unborn child. |
| H413 | May cause long lasting harmful effects to aquatic life. |

Precautionary Statements

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P210 | Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P261 | Avoid breathing dust. |
| P264 | Wash skin thoroughly after handling. |
| P272 | Contaminated work clothing must not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P285 | In case of inadequate ventilation wear respiratory protection. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P341 | IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P342 + P311 | If experiencing respiratory symptoms: Call a POISON CENTER/ doctor. |
| P363 | Wash contaminated clothing before reuse. |



The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

| | |
|---|---|
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## SECTION 3: Composition/information on ingredients

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | Co |
| Molecular weight | : | 58.93 g/mol |
| CAS-No. | : | 7440-48-4 |
| EC-No. | : | 231-158-0 |
| Index-No. | : | 027-001-00-9 |

| Component | Classification | Concentration |
|---|---|---|
| **Cobalt** | | |
| | Flam. Sol. 1; Eye Irrit. 2A; Resp. Sens. 1; Skin Sens. 1; Muta. 2; Carc. 1B; Repr. 1B; Aquatic Chronic 4; H228, H319, H334, H317, H341, H350, H360, H413 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

**4.1 Description of first-aid measures**

**General advice**
First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Call in physician.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

**If swallowed**
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.



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### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture
Cobalt/cobalt oxides
Not combustible.
Ambient fire may liberate hazardous vapours.

### 5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information
Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions
Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections
For disposal see section 13.



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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Work under hood. Do not inhale substance/mixture.

**Advice on protection against fire and explosion**
Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.

**Hygiene measures**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Air sensitive. Handle and store under inert gas.

**Storage class**
Storage class (TRGS 510): 4.1B: Flammable solid hazardous materials

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Cobalt | 7440-48-4 | TWA | 0.05 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 0.05 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 0.1 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | PEL | 0.02 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
| | | TWA | 0.005 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Respiratory sensitization<br>Suspected human carcinogen | | |



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| | | | | |
|---|---|---|---|---|
| | | TWA | 0.02 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Dermal Sensitization<br>Respiratory sensitization<br>Confirmed animal carcinogen with unknown relevance to humans | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| Cobalt | 7440-48-4 | Cobalt | 15 µg/l | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | End of shift at end of workweek | | | |
| | | Cobalt | | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | | End of shift at end of workweek | | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
Handle with impervious gloves.

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

**Body Protection**
Flame retardant antistatic protective clothing.



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**Respiratory protection**
Recommended Filter type: Filter type P3
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains. Risk of explosion.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: powder |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | No data available |
| f) | Initial boiling point and boiling range | 2,900 °C 5,252 °F - lit. |
| g) | Flash point | ()Not applicable |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | The substance or mixture is a flammable solid with the category 1. |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | No data available |
| l) | Vapor density | No data available |
| m) | Density | 8.9 g/mL at 25 °C (77 °F) - lit. |
| | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 5.0 |
| p) | Autoignition temperature | No data available |
| q) | Decomposition temperature | No data available |



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| | | |
|---|---|---|
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | none |

**9.2 Other safety information**
No data available

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
The product is chemically stable under standard ambient conditions (room temperature) .

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
no information available

**10.5 Incompatible materials**
Oxidizing agents, Mineral acidsAcetylene, Hydrazinium nitrate, Material readily reacts with acids generating flammable and/or explosive hydrogen gas.

**10.6 Hazardous decomposition products**
In the event of fire: see section 5

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 6,171 mg/kg
Remarks: Behavioral:Somnolence (general depressed activity).
Behavioral:Ataxia.
Diarrhea
Inhalation: No data available
Dermal: No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Causes serious eye irritation.
(OECD Test Guideline 405)

**Respiratory or skin sensitization**
May cause allergic respiratory and skin reactions

**Germ cell mutagenicity**



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Suspected of causing genetic defects.

**Carcinogenicity**
Presumed to have carcinogenic potential for humans

IARC: 2A - Group 2A: Probably carcinogenic to humans (Cobalt)

2A - Group 2A: Probably carcinogenic to humans (Cobalt)

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
May damage fertility.

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

RTECS: GF8750000
Kidney injury may occur., Damage to the eyes., Lung irritation, Throat., Rash, Vomiting, Diarrhea
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Danio rerio (zebra fish) - 100.01 mg/l - 96 h |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202) |
| Toxicity to algae | static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 0.270 mg/l - 70 h (OECD Test Guideline 201) |

### 12.2 Persistence and degradability
The methods for determining biodegradability are not applicable to inorganic substances.

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available



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### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**

UN number: 3089 Class: 4.1 Packing group: II
Proper shipping name: Metal powders, flammable, n.o.s.
Reportable Quantity (RQ):
Poison Inhalation Hazard: No

**IMDG**

UN number: 3089 Class: 4.1 Packing group: II EMS-No: F-G, S-G
Proper shipping name: METAL POWDER, FLAMMABLE, N.O.S.

**IATA**

UN number: 3089 Class: 4.1 Packing group: II
Proper shipping name: Metal powder, flammable, n.o.s.

## SECTION 15: Regulatory information

**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.



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**SARA 311/312 Hazards** : Fire Hazard
Acute Health Hazard
Chronic Health Hazard

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

| | | |
|---|---|---|
| Cobalt | 7440-48-4 | >= 90 - <= 100 % |

**US State Regulations**

**Massachusetts Right To Know**

| | |
|---|---|
| Cobalt | 7440-48-4 |

**Pennsylvania Right To Know**

| | |
|---|---|
| Cobalt | 7440-48-4 |

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

| | |
|---|---|
| Cobalt | 7440-48-4 |

**Washington Chemicals of High Concern**

| | |
|---|---|
| Cobalt | 7440-48-4 |

**California Prop. 65**

WARNING: This product can expose you to chemicals including Cobalt, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16: Other information

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.
Version: 6.12 Revision Date: 09/08/2024 Print Date: 09/09/2024



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# SAFETY DATA SHEET

Version 6.9
Revision Date 09/07/2024
Print Date 09/08/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Copper

Product Number : 349178
Brand : Aldrich
Index-No. : 029-024-00-X
CAS-No. : 7440-50-8

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

### 2.2 GHS Label elements, including precautionary statements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.



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**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## SECTION 3: Composition/information on ingredients

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | Cu |
| Molecular weight | : | 63.55 g/mol |
| CAS-No. | : | 7440-50-8 |
| EC-No. | : | 231-159-6 |
| Index-No. | : | 029-024-00-X |

| Component | Classification | Concentration |
|---|---|---|
| **Copper(bulk)** | | |
| | | <= 100 % |

## SECTION 4: First aid measures

**4.1 Description of first-aid measures**

**If inhaled**
After inhalation: fresh air.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Remove contact lenses.

**If swallowed**
After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## SECTION 5: Firefighting measures

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.



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### 5.2 Special hazards arising from the substance or mixture
Copper oxides
Not combustible.
Ambient fire may liberate hazardous vapours.

### 5.3 Advice for firefighters
In the event of fire, wear self-contained breathing apparatus.

### 5.4 Further information
Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid inhalation of dusts. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

### 6.2 Environmental precautions
Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections
For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Dry.

Store under inert gas. Air sensitive.

**Storage class**
Storage class (TRGS 510): 13: Non Combustible Solids

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated



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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Copper(bulk) | 7440-50-8 | TWA | 1 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | TWA | 0.2 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | TWA | 1 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 1 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 1 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 0.1 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | PEL | 0.1 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |

### 8.2 Exposure controls

**Appropriate engineering controls**
Change contaminated clothing. Wash hands after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
Handle with impervious gloves.

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm



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Break through time: 480 min
Material tested:KCL 741 Dermatril® L

**Respiratory protection**
Recommended Filter type: Filter type P2
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: Foil |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/ range: 1,083.4 °C (1,982.1 °F) - lit. |
| f) | Initial boiling point and boiling range | 2,567 °C 4,653 °F - lit. |
| g) | Flash point | ()Not applicable |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | The product is not flammable. |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | No data available |
| l) | Vapor density | No data available |
| m) | Density | 8.94 g/mL at 25 °C (77 °F) - lit. |
| | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | Not applicable for inorganic substances |
| p) | Autoignition | No data available |



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| | | |
|---|---|---|
| | temperature | |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | none |

**9.2 Other safety information**
No data available

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
The product is chemically stable under standard ambient conditions (room temperature) .

**10.3 Possibility of hazardous reactions**
Exothermic reaction with:
Ethylene oxide
Fluorine
hydrogen sulphide
halogen-halogen compounds
alkali oxides
nitrides
Salts of hydrazine
Sulfuric acid
Risk of ignition or formation of inflammable gases or vapours with:
Oxidizing agents
Chlorine
Risk of explosion with:
Acetylene
azides
ammonium compounds
iodates
bromopropine
perchlorates
bromates
picrates
chlorates
Peroxides

**10.4 Conditions to avoid**
no information available

**10.5 Incompatible materials**
No data available



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### 10.6 Hazardous decomposition products

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
Oral: No data available
Inhalation: No data available
Dermal: No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

RTECS: GL5325000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.



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## SECTION 12: Ecological information

### 12.1 Toxicity
No data available

### 12.2 Persistence and degradability
The methods for determining biodegradability are not applicable to inorganic substances.

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties
No data available

### 12.7 Other adverse effects
No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**
Not dangerous goods

**IMDG**
Not dangerous goods

**IATA**
Not dangerous goods

**Further information**
Not classified as dangerous in the meaning of transport regulations.



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## SECTION 15: Regulatory information

**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations**

**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know**

Copper(bulk) 7440-50-8

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

**Washington Chemicals of High Concern**

Product does not contain any listed chemicals

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16: Other information

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its



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Version: 6.9 Revision Date: 09/07/2024 Print Date: 09/08/2024



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# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 7.5
Revision Date 04.03.2024
Print Date 16.09.2024
GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

| | | |
|---|---|---|
| Product name | : | Cumene |
| Product Number | : | C87657 |
| Brand | : | Aldrich |
| Index-No. | : | 601-024-00-X |
| REACH No. | : | A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline. |
| CAS-No. | : | 98-82-8 |

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

| | | |
|---|---|---|
| Identified uses | : | Laboratory chemicals, Manufacture of substances |

### 1.3 Details of the supplier of the safety data sheet

| | | |
|---|---|---|
| Company | : | Sigma-Aldrich Inc.<br>3050 SPRUCE ST<br>ST. LOUIS MO 63103<br>UNITED STATES |
| Telephone | : | +1 314 771-5765 |
| Fax | : | +1 800 325-5052 |

### 1.4 Emergency telephone

| | | |
|---|---|---|
| Emergency Phone # | : | 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week |

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

| | |
|---|---|
| Flammable liquids, (Category 3) | H226: Flammable liquid and vapor. |
| Carcinogenicity, (Category 1B) | H350: May cause cancer. |



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| | |
|---|---|
| Specific target organ toxicity - single exposure, (Category 3), Respiratory system | H335: May cause respiratory irritation. |
| Aspiration hazard, (Category 1) | H304: May be fatal if swallowed and enters airways. |
| Long-term (chronic) aquatic hazard, (Category 2) | H411: Toxic to aquatic life with long lasting effects. |

## 2.2 Label elements

**Labelling according Regulation (EC) No 1272/2008**

Pictogram



| | |
|---|---|
| Signal Word | Danger |
| Hazard Statements | |
| H226 | Flammable liquid and vapor. |
| H304 | May be fatal if swallowed and enters airways. |
| H335 | May cause respiratory irritation. |
| H350 | May cause cancer. |
| H411 | Toxic to aquatic life with long lasting effects. |
| Precautionary Statements | |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed. |
| P273 | Avoid release to the environment. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER/ doctor. |
| P331 | Do NOT induce vomiting. |
| Supplemental Hazard Statements | none |

**Reduced Labeling (<= 125 ml)**

Pictogram



| | |
|---|---|
| Signal Word | Danger |
| Hazard Statements | |
| H350 | May cause cancer. |
| H304 | May be fatal if swallowed and enters airways. |
| Precautionary Statements | |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER/ doctor. |
| P331 | Do NOT induce vomiting. |



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Supplemental Hazard Statements none

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Toxicological information:
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
May form explosive peroxides.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : Isopropylbenzene

Formula : $C_9H_{12}$
Molecular weight : 120,19 g/mol
CAS-No. : 98-82-8
EC-No. : 202-704-5
Index-No. : 601-024-00-X

| Component | | Classification | Concentration |
|---|---|---|---|
| **cumene** | | | |
| CAS-No.<br>EC-No.<br>Index-No. | 98-82-8<br>202-704-5<br>601-024-00-X | Flam. Liq. 3; Carc. 1B; STOT SE 3; Asp. Tox. 1; Aquatic Chronic 2; H226, H350, H335, H304, H411 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Call in physician.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.



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**In case of eye contact**
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

**If swallowed**
After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Carbon dioxide (CO2) Foam Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides
Combustible.
Vapors are heavier than air and may spread along floors.
Forms explosive mixtures with air at elevated temperatures.
Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information
Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.
Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions
Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.



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### 6.4 Reference to other sections
For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

**Advice on protection against fire and explosion**
Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.

**Hygiene measures**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Store under inert gas.

**Storage class**
Storage class (TRGS 510): 3: Flammable liquids

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**

### 8.2 Exposure controls

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please



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contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: Viton®
Minimum layer thickness: 0,7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0,4 mm
Break through time: 10 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

**Body Protection**
Flame retardant antistatic protective clothing.

**Respiratory protection**
Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Control of environmental exposure**
Do not let product enter drains. Risk of explosion.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Physical state | liquid, clear |
| b) | Color | colorless |
| c) | Odor | aromatic |
| d) | Melting point/freezing point | Melting point/range: -96 °C - lit. |
| e) | Initial boiling point and boiling range | 152 - 154 °C - lit. |
| f) | Flammability (solid, gas) | No data available |
| g) | Upper/lower flammability or explosive limits | Upper explosion limit: 6,0 %(V)<br>Lower explosion limit: 0,9 %(V) |
| h) | Flash point | 31,0 °C - closed cup |



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| | | |
|---|---|---|
| i) | Autoignition temperature | 425,0 °C |
| j) | Decomposition temperature | No data available |
| k) | pH | Not applicable |
| l) | Viscosity | Viscosity, kinematic: No data available<br>Viscosity, dynamic: 0,79 mPa.s at 20 °C |
| m) | Water solubility | ca.0,05 g/l at 25 °C - slightly soluble |
| n) | Partition coefficient: n-octanol/water | log Pow: 3,55 at 23 °C - Bioaccumulation is not expected. |
| o) | Vapor pressure | 11 hPa at 20,0 °C |
| p) | Density | 0,864 g/mL at 25 °C - lit. |
| | Relative density | No data available |
| q) | Relative vapor density | No data available |
| r) | Particle characteristics | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | none |

**9.2 Other safety information**

| | |
|---|---|
| Surface tension | 27,69 mN/m at 25 °C |

## SECTION 10: Stability and reactivity

**10.1 Reactivity**

Vapor/air-mixtures are explosive at intense warming.

**10.2 Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

No data available

**10.4 Conditions to avoid**

Heating.

**10.5 Incompatible materials**

No data available

**10.6 Hazardous decomposition products**

In the event of fire: see section 5



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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
Symptoms: gastric pain, Vomiting
Symptoms: mucosal irritations, Cough, Shortness of breath, Headache, Nausea, Vomiting,
Possible damages:, damage of respiratory tract
Dermal: No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: No skin irritation
(OECD Test Guideline 404)
Remarks: Drying-out effect resulting in rough and chapped skin.

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: No eye irritation - 72 h
(OECD Test Guideline 405)

**Respiratory or skin sensitization**
Maximization Test - Guinea pig
Result: negative
(OECD Test Guideline 406)

**Germ cell mutagenicity**
Test Type: Mutagenicity (mammal cell test): chromosome aberration.
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
Test Type: Ames test
Test system: S. typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
Test Type: unscheduled DNA synthesis assay
Test system: rat hepatocytes
Metabolic activation: without metabolic activation
Method: OECD Test Guideline 482
Result: negative

Test Type: Micronucleus test
Species: Mouse
Cell type: Red blood cells (erythrocytes)
Application Route: inhalation (gas)
Method: OECD Test Guideline 474
Result: negative



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Test Type: Micronucleus test
Species: Rat
Cell type: Bone marrow
Application Route: Intraperitoneal
Method: OECD Test Guideline 474
Result: Positive results were obtained in some in vivo tests.

**Carcinogenicity**
Presumed to have carcinogenic potential for humans

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
Inhalation - May cause respiratory irritation. - Respiratory Tract
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
Aspiration may cause pulmonary edema and pneumonitis.

## 11.2 Additional Information

**Endocrine disrupting properties**

**Product:**

| | |
|---|---|
| Assessment | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |

RTECS: GR8575000
narcosis, Central nervous system depression, Dermatitis, Gastrointestinal disturbance, Damage to the lungs., Liver injury may occur., Kidney injury may occur.
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After uptake of large quantities:

somnolence
Dizziness
narcosis

Effect potentiated by: ethanol

Handle in accordance with good industrial hygiene and safety practice.



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## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | flow-through test LC50 - Cyprinodon variegatus (sheepshead minnow) - 4,7 mg/l - 96 h<br>(US-EPA) |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Daphnia magna (Water flea) - 2,14 mg/l - 48 h<br>(OECD Test Guideline 202) |
| Toxicity to algae | static test ErC50 - Desmodesmus subspicatus (green algae) - 2,01 mg/l - 72 h<br>(OECD Test Guideline 201) |
| Toxicity to bacteria | static test EC50 - activated sludge - > 2.000 mg/l - 3 h<br>(OECD Test Guideline 209) |
| Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) | semi-static test NOEC - Daphnia magna (Water flea) - 0,35 mg/l - 21 d<br>(OECD Test Guideline 211) |

### 12.2 Persistence and degradability

| | |
|---|---|
| Biodegradability | aerobic - Exposure time 20 d<br>Result: 70 % - Readily biodegradable.<br>Remarks: (ECHA) |

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

**Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

Discharge into the environment must be avoided.



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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

No data available

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID: 1918 IMDG: 1918 IATA: 1918

### 14.2 UN proper shipping name

ADR/RID: ISOPROPYLBENZENE
IMDG: ISOPROPYLBENZENE
IATA: Isopropylbenzene

### 14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

### 14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

### 14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

### 14.6 Special precautions for user

Tunnel restriction code : (D/E)

Further information : No data available

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Authorisations and/or restrictions on use**

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : cumene

**National legislation**

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

E2 ENVIRONMENTAL HAZARDS

P5c FLAMMABLE LIQUIDS



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**Other regulations**
Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

**15.2 Chemical Safety Assessment**
For this product a chemical safety assessment was not carried out

## SECTION 16: Other information

**Full text of H-Statements**

| | |
|---|---|
| H226 | Flammable liquid and vapor. |
| H304 | May be fatal if swallowed and enters airways. |
| H335 | May cause respiratory irritation. |
| H350 | May cause cancer. |
| H411 | Toxic to aquatic life with long lasting effects. |



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**Full text of other abbreviations**

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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AccuStandard, Inc.
125 Market St., New Haven, CT 06513 USA
Tel: 203-786-5290 Fax: 203-786-5287

*SAFETY DATA SHEET*

## SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### 1.1 - Product Identifiers

Catalog Name: WC-CN-1X-1

Description: Cyanide Standard

### 1.2 - Relevant Identified Uses of the Substance or Mixture

Laboratory Chemical Reference Material

### 1.3 - Supplier Details

Company: AccuStandard, Inc.
125 Market St.
New Haven, CT 06513 USA

Telephone Number: 203-786-5290

Fax: 203-786-5287

Email: edocs@accustandard.com

### 1.4 - Emergency Telephone Number

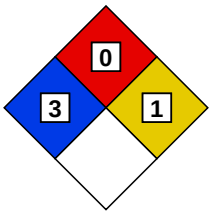
Emergency Phone #: AccuStandard, Inc.
1-203-502-7070 (USA)
+001-203-502-7070 (International)

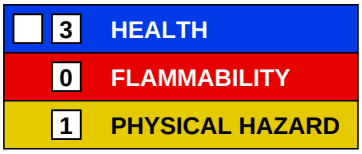
24 hours / 7 days a week

## SECTION 2 - HAZARDS IDENTIFICATION

### 2.1 - GHS Label Elements






**Signal Word: Danger**

**Hazard Codes:**

H302 - Harmful if swallowed. (Acute toxicity, oral, category 4)

H314 - Causes skin burns. (Skin corrosion/irritation, category 1)

H318 - Causes serious eye damage. (Eye damage/irritation, category 1)

H332 - Harmful if inhaled. (Acute toxicity, inhalation, category 4)

**Precautionary Codes:**

P202 - This product should only by used by persons trained in the safe handling of hazardous chemicals.

P233 - Store in a tightly closed container. (P404)

P262 - Do not get in eyes, on skin or clothing.

P264 - Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available.

P280 - Protective gloves must be worn to prevent skin contact.

## SECTION 2 - HAZARDS IDENTIFICATION *- continued*

### 2.1 - GHS Label Elements *- continued*

P284 - Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), or a risk assessment shows air-purifying respirators are appropriate, use of a NIOSH/MSHA approved air supplied respirator is advised. Use a full-face respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges in absence of proper environmental control. Always use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Engineering and/or administrative controls should be implemented to reduce exposure.

P331 - Ingestion: Do NOT induce vomiting. Call a physician or poison control center immediately. Give victim a glass of water a little at a time. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, lower head below waist to prevent fluid from entering the lungs.

P338 - Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers.

P360 - Skin contact: Immediately flush skin with plenty amounts of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Thoroughly wash (or discard) clothing and shoes before reuse.

### 2.2 - Other Hazards

#### 2.2.1 - Symptom of Exposure Health/Environment

Corrosive.

May cause stomach cramps and gastro-intestinal disturbances.

May cause burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

#### 2.2.2 - Potential Health Effects

Causes serious eye damage. (Eye damage/irritation, category 1)

Causes skin burns. (Skin corrosion/irritation, category 1)

May be harmful if absorbed through the skin. (Acute toxicity, dermal, category 5)

Extremely destructive to tissue of the mucous membranes and upper respiratory tract.

Harmful if inhaled. (Acute toxicity, inhalation, category 4)

Harmful if swallowed. (Acute toxicity, oral, category 4)

#### 2.2.3 - Routes of Entry

Inhalation, ingestion or skin contact.

#### 2.2.4 - Carcinogenicity

This product is or contains a component that is not listed (ACGIH, IARC, NTP, OSHA) as a cancer causing agent.

## SECTION 3 - COMPOSITION / ANALYTES DATA

Description: Cyanide Standard

| | | | ACGIH -TLV (mg/m³) | | | OSHA -PEL (mg/m³) | | |
|---|---|---|---|---|---|---|---|---|
| Analyte | CAS # | % Concentration | TWA | STEL | Skin | TWA | STEL | Skin |
| Potassium cyanide | 151-50-8 | 0.025 | | | X | 5 | | X |
| Sodium hydroxide | 1310-73-2 | 2.000 | (C)2 (C)2 | | | 2 | | |
| Water | 7732-18-5 | 97.975 | | | | | | |

## SECTION 4 - FIRST AID MEASURES

### 4.2 - Eye Contact

Eye contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. (P338)

### 4.3 - Skin Contact

Skin contact: Immediately flush skin with plenty amounts of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Thoroughly wash (or discard) clothing and shoes before reuse. (P360)

### 4.4 - Inhalation

Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

### 4.5 - Ingestion

Ingestion: Do NOT induce vomiting. Call a physician or poison control center immediately. Give victim a glass of water a little at a time. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, lower head below waist to prevent fluid from entering the lungs. (P331)

## SECTION 5 - FIRE FIGHTING MEASURES

### 5.1 - Flammable Properties

During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Reacts with most metals to form flammable hydrogen gas.

### 5.2 - Extinguishing Media

Do not use water.

Use dry chemical when fighting fires involving this material.

### 5.3 - Protection of Firefighters

As in any fire, wear self-contained breathing apparatus pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### 6.1 - Spill Response

Wear a self-contained breathing apparatus and appropriate Personal protection. Prevent contact with skin or eyes. Ventilate area. Stop leak if you can do so without risk. Absorb on sand or vermiculite, take up and containerize for proper disposal. Flush spill area with water. Comply with Federal, State, and local regulations.

## SECTION 7 - HANDLING AND STORAGE

Store in a tightly closed container. (P404)

Keep refrigerated.

Avoid metal containers.

Material is hygroscopic.

Avoid inhalation.

Use with adequate ventilation.

Do not get in eyes, on skin or clothing. (P262)

Avoid prolonged or repeated exposure.

This product should only by used by persons trained in the safe handling of hazardous chemicals. (P202)

## SECTION 8 - EXPOSURE CONTROLS

### 8.1 - Engineering Controls/PPE

Wash thoroughly after handling. Do not take internally. Eye wash and safety equipment should be readily available. (P264)

### 8.2 - General Hygene Considerations

Respiratory Protection: If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), or a risk assessment shows air-purifying respirators are appropriate, use of a NIOSH/MSHA approved air supplied respirator is advised. Use a full-face respirator with multi-purpose combination (US) or type ABEK (EN14387) respirator cartridges in absence of proper environmental control. Always use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Engineering and/or administrative controls should be implemented to reduce exposure.

Material should be handled or transferred in an approved fume hood or with adequate ventilation.

Protective gloves must be worn to prevent skin contact. (P280)

(Chloroprene, natural rubber, nitrile, or equivalent)

Wear safety glasses with side shields (or googles) and a face shield.

Use eye protection tested and approved under the appropriate government standards such as NIOSH (US) or EN 166 (EU).

All recommendations are advisory only and must be evaluated by an industrial hygienist and/or safety officer familiar with the specific situation of anticipated use, such as concentration and amount of the substance in the workplace. Any recommendation should not be construed as offering an approval for any specific use of the product.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear liquid

Odor: Practically odorless

Odor Threshold: N/A

pH: 13-14

Melting Point: -4 °C (5% soln)

Boiling Point: 102 °C (5% soln)

Flash Point: N/A

Evaporation Rate (Butyl Acetate=1): N/A

Flammability Class: N/A

Lower Flammability Level: N/A

Upper Flammability Level: N/A

Vapor Pressure: N/A

Vapor Density (Air = 1): >1 g/l

Specific Gravity: 1.05 g/cm3 (5% soln)

Solubility in Water: Soluble

Partition Coefficient: N/A

Autoignition Temperature: N/A

Decomposition Temperature: N/A

Viscosity: N/A

VOC Content: N/A

Percent Volatile: N/A

## SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable

Materials to Avoid: Oxidizers
Acids

Hazardous Decomposition: Sodium oxides

Hazardous Polymerization: Will not occur

Condition to Avoid: Prolonged exposure to air

## SECTION 11 - TOXICOLOGICAL INFORMATION

**Human Health Toxicity**

See section 2 for specific toxicological information for the ingredients of this product.

LD50 (Oral): N/A

LD50 (Dermal) : N/A

LC50 (Inhalation): N/A

No specific human health toxicity information is available for this product.

No other information related to the toxicological properties of this product is available at this time.

## SECTION 12 - ECOLOGICAL INFORMATION

**Environmental Toxicity**

By complying with sections 6 and 7 there should be no release to the environment.

LC50 (Fish): N/A

EC50 (Aquatic Invertebrate): N/A

BCF: N/A

No specific environmental toxicity information is available for this product.

No other information related to the ecological properties of this product is available at this time.

## SECTION 13 - DISPOSAL CONSIDERATIONS

Recycle or incinerate at any EPA approved facility or dispose in compliance with Federal, State and local regulations. Empty containers must be triple-rinsed prior to disposal.

## SECTION 14 - TRANSPORT INFORMATION

Transportation Information (DOT/IATA)

UN Number: UN1824

Class: 8

Packing Group: III

Proper Shipping Name: Sodium hydroxide solution

Poison by Inhalation: No

Marine Pollutant: No

## SECTION 15 - REGULATORY INFORMATION

This product does not contain compounds subject to EU Regulation (EC) No 1907/2006 (REACH) on Annex XIV, Annex XVII, and/or Article 59.

## SECTION 15 - REGULATORY INFORMATION *- continued*

All components are listed on the TSCA Inventory.

**For laboratory, research and development use only. Not for manufacturing or commercial purposes.**

In addition to federal and state regulations, local regulations may apply. Check with your local regulatory authorities.

## SECTION 16 - OTHER INFORMATION

This document has been designed to meet the requirements of OSHA, ANSI, GHS and CHIPs regulations. Chemicals are classified using the Globally Harmonized System for Classification and Labeling of Chemicals and CLP Regulation (EC) No. 1272/2008.

The statements contained herein are offered for informational purposes only and are based on technical data that we believe to be accurate. The manufacturer will not assume any liability for the accuracy and completeness of this information. Final determination of the suitability of the material is the responsibility of the user. Although certain hazards are described herein, the user should not presume that these are the only hazards that exist. Since conditions and manner of use are outside of the manufacturers control, we make

**NO WARRANTY OF MERCHANTABILITY, EXPRESSED OR IMPLIED, AND ASSUME NO LIABILITY RESULTING FROM ITS USE.**

Legend : N/A = Not Available ND = Not Determined NR = Not Regulated

Alteration of any information contained herein without written permission from the manufacturer is strictly prohibited.

## HMIS/NFPA HAZARD INDEX

0 - Minimal
1 - Slight
2 - Moderate
3 - Serious
4 - Severe

* - Additional Hazard

## GHS HAZARD INDEX

Category 1 - Most Severe
Category 5 - Least Severe

**** End of Document ****

# SAFETY DATA SHEET

Version 5.8
Revision Date 03/07/2015
Print Date 02/23/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Cyclohexane

Product Number : 320633
Brand : Aldrich
Index-No. : 601-017-00-1

CAS-No. : 110-82-7

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 2), H225
Skin irritation (Category 2), H315
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
Aspiration hazard (Category 1), H304
Acute aquatic toxicity (Category 1), H400

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.

Precautionary statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.

| | |
|---|---|
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 + P312 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P331 | Do NOT induce vomiting. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $C_6H_{12}$ |
| Molecular weight | : | 84.16 g/mol |
| CAS-No. | : | 110-82-7 |
| EC-No. | : | 203-806-2 |
| Index-No. | : | 601-017-00-1 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Cyclohexane** | | |
| | Flam. Liq. 2; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1; Aquatic Acute 1; H225, H304, H315, H336, H400 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
No data available

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Use explosion-proof equipment.Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Flammable liquids

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Cyclohexane | 110-82-7 | TWA | 100.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Central Nervous System impairment | | |
| | | TWA | 300.000000 ppm 1,050.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 300.000000 ppm 1,050.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | The value in mg/m3 is approximate. | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 480 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 35 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 4 - 7 °C (39 - 45 °F) - lit. |
| f) | Initial boiling point and boiling range | 80.7 °C (177.3 °F) - lit. |
| g) | Flash point | -17.99 °C (-0.38 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 9 %(V)<br>Lower explosion limit: 1 %(V) |
| k) | Vapour pressure | 225.0 hPa (168.8 mmHg) at 37.7 °C (99.9 °F)<br>102.7 hPa (77.0 mmHg) at 20.0 °C (68.0 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 0.779 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 3.44 |
| p) | Auto-ignition temperature | 260.0 °C (500.0 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Vapours may form explosive mixture with air.

### 10.4 Conditions to avoid

Heat, flames and sparks.

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - 12,705 mg/kg

LC50 Inhalation - Rat - 4 h - 34,000 mg/l
(OECD Test Guideline 403)

LD50 Dermal - Rabbit - > 2,000 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: No skin irritation

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Mild eye irritation

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

| | |
|---|---|
| IARC: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| ACGIH: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
May be fatal if swallowed and enters airways.

**Additional Information**
RTECS: GU6300000

Central nervous system depression, Drowsiness, Irritability, Dizziness, Gastrointestinal disturbance, Lung irritation, chest pain, pulmonary edema

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | flow-through test LC50 - Pimephales promelas (fathead minnow) - 4.53 mg/l - |

| | |
|---|---|
| | 96 h<br>(OECD Test Guideline 203) |
| Toxicity to daphnia and other aquatic invertebrates | Immobilization EC50 - Daphnia magna (Water flea) - 0.9 mg/l - 48 h<br>(OECD Test Guideline 202) |
| Toxicity to algae | EC50 - Pseudokirchneriella subcapitata (green algae) - 3.4 mg/l - 72 h<br>(OECD Test Guideline 201) |

**12.2 Persistence and degradability**

Biodegradability Result: - Readily biodegradable

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**

UN number: 1145 Class: 3 Packing group: II
Proper shipping name: Cyclohexane
Reportable Quantity (RQ): 1000 lbs

Poison Inhalation Hazard: No

**IMDG**

UN number: 1145 Class: 3 Packing group: II EMS-No: F-E, S-D
Proper shipping name: CYCLOHEXANE
Marine pollutant:yes

**IATA**

UN number: 1145 Class: 3 Packing group: II
Proper shipping name: Cyclohexane

## 15. REGULATORY INFORMATION

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Cyclohexane | 110-82-7 | 2007-07-01 |

**SARA 311/312 Hazards**

Fire Hazard, Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Cyclohexane | 110-82-7 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Cyclohexane | 110-82-7 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Cyclohexane | 110-82-7 | 2007-07-01 |

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| Asp. Tox. | Aspiration hazard |
| Flam. Liq. | Flammable liquids |
| H225 | Highly flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H336 | May cause drowsiness or dizziness. |
| H400 | Very toxic to aquatic life. |
| Skin Irrit. | Skin irritation |
| STOT SE | Specific target organ toxicity - single exposure |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | |
| Flammability: | 3 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.8 Revision Date: 03/07/2015 Print Date: 02/23/2016

# Safety Data Sheet
## acc. to OSHA HCS

Printing date 01/15/2024 Revision date 01/15/2024

* 

## 1 Identification

· **Product identifier**

· **Trade name: p,p'-DDE**
· **Synonym**
1,1'-(2,2-dichloroethenylidene)bis[4-chloro-benzene]
4,4'-DDE
4,4'-Dichlorodiphenyldichloroethylene
p,p'-Dichlorodiphenyldichloroethylene
NSC 1153

· **Article number:** 24241
· **CAS Number:**
72-55-9
· **EC number:**
200-784-6
· **Application of the substance / the mixture**
This product is for research use - Not for human or veterinary diagnostic or therapeutic use.

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Cayman Chemical Co.
1180 E. Ellsworth Rd.
Ann Arbor, MI 48108
USA

· **Information department:** Product safety department
· **Emergency telephone number:**
During normal opening times: +1 (734) 971-3335
US/CANADA: 800-424-9300
Outside US/CANADA: 703-741-5970

## 2 Hazard(s) identification

· **Classification of the substance or mixture**


GHS06 Skull and crossbones

Acute Toxicity - Oral 3 H301 Toxic if swallowed.


GHS08 Health hazard

Carcinogenicity 2 H351 Suspected of causing cancer.

Specific Target Organ Toxicity - Repeated Exposure 1 H372 Causes damage to organs through prolonged or repeated exposure.

(Contd. on page 2)

# Safety Data Sheet
## acc. to OSHA HCS

Printing date 01/15/2024 Revision date 01/15/2024

**Trade name: p,p'-DDE**

(Contd. from page 1)



GHS09 Environment

Aquatic Acute 1 H400 Very toxic to aquatic life.
Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

· **Label elements**
· **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**



GHS06 GHS08 GHS09

· **Signal word** Danger
· **Hazard statements**
H301 Toxic if swallowed.
H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
· **Precautionary statements**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 If swallowed: Immediately call a poison center/doctor.
P321 Specific treatment (see on this label).
P330 Rinse mouth.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P391 Collect spillage.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Classification system:**
· **NFPA ratings (scale 0 - 4)**




Health = 1
Fire = 0
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**




Health = 1
Fire = 0
Reactivity = 0

(Contd. on page 3)

# Safety Data Sheet
## acc. to OSHA HCS

Printing date 01/15/2024 Revision date 01/15/2024

**Trade name: p,p'-DDE**

(Contd. from page 2)

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· **Chemical characterization: Substances**
· **CAS No. Description**
72-55-9 p,p'-DDE
· **Identification number(s)**
· **EC number:** 200-784-6

## 4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
In case of irregular breathing or respiratory arrest provide artificial respiration.
· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:** Do not induce vomiting; immediately call for medical help.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

## 5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
Use fire fighting measures that suit the environment.
A solid water stream may be inefficient.
· **Special hazards arising from the substance or mixture** No further relevant information available.
· **Advice for firefighters**
· **Protective equipment:** No special measures required.

## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Not required.
· **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 13.

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# Safety Data Sheet
## acc. to OSHA HCS

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**Trade name: p,p'-DDE**

(Contd. from page 3)

· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
· **Protective Action Criteria for Chemicals**
· **PAC-1:** 6.5 mg/m³
· **PAC-2:** 72 mg/m³
· **PAC-3:** 170 mg/m³

* 
## 7 Handling and storage

· **Handling:**
· **Precautions for safe handling** Thorough dedusting.
· **Information about protection against explosions and fires:** No special measures required.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:** Store in accordance with information listed on the product insert.
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** None.
· **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see section 7.

· **Control parameters**
· **Components with limit values that require monitoring at the workplace:** Not required.
· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
· **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

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**Trade name: p,p'-DDE**

(Contd. from page 4)

· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:**



Tightly sealed goggles

* 
## 9 Physical and chemical properties

| | |
|---|---|
| · **Information on basic physical and chemical properties** | |
| · **General Information** | |
| · **Appearance:** | |
| **Form:** | Solid |
| **Color:** | Not determined. |
| · **Odor:** | Characteristic |
| · **Structural Formula** | C14H8Cl4 |
| · **Molecular Weight** | 318 g/mol |
| · **Odor threshold:** | Not determined. |
| · **pH-value:** | Not applicable. |
| · **Change in condition** | |
| **Melting point/Melting range:** | Undetermined. |
| **Boiling point/Boiling range:** | Undetermined. |
| · **Flash point:** | Not applicable. |
| · **Flammability (solid, gaseous):** | Product is not flammable. |
| · **Decomposition temperature:** | Not determined. |
| · **Ignition temperature:** | Not determined. |
| · **Danger of explosion:** | Product does not present an explosion hazard. |
| · **Explosion limits:** | |
| **Lower:** | Not determined. |
| **Upper:** | Not determined. |
| · **Vapor pressure:** | Not applicable. |
| · **Density:** | Not determined. |
| · **Relative density** | Not determined. |
| · **Vapor density** | Not applicable. |
| · **Evaporation rate** | Not applicable. |
| · **Solubility in / Miscibility with** | |
| **Water:** | Not determined. |
| · **Partition coefficient (n-octanol/water):** | Not determined. |
| · **Viscosity:** | |
| **Dynamic:** | Not applicable. |
| **Kinematic:** | Not applicable. |
| **SOLUBILITY** | Chloroform: Slightly Soluble |

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# Safety Data Sheet
## acc. to OSHA HCS

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**Trade name: p,p'-DDE**

(Contd. from page 5)

· **Other information** No further relevant information available.

## 10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** strong bases, strong oxidizing agents
· **Hazardous decomposition products:** carbon oxides, hydrogen chloride

## 11 Toxicological information

· **RTECS Number** KV9450000
· **Information on toxicological effects**
· **Acute toxicity:**

| · **LD/LC50 values that are relevant for classification:** | | |
|---|---|---|
| Oral | LD50 | 880 mg/kg (rat) |
| | Intraperitoneal LD50 | 500 µg/kg (mouse) |
| | Intraperitoneal LD50 | 159 mg/kg (rat) |

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**

· **Carcinogenic categories**
· **IARC (International Agency for Research on Cancer)** Substance is not listed.
· **NTP (National Toxicology Program)** Substance is not listed.
· **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.

## 12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Ecotoxical effects:**
· **Remark:** Very toxic for fish
· **Additional ecological information:**
· **General notes:**
Water hazard class 3 (Assessment by list): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.

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# Safety Data Sheet
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**Trade name: p,p'-DDE**

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Very toxic for aquatic organisms
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

| | |
|---|---|
| · **UN-Number** | |
| · **DOT, IMDG, IATA** | UN2811 |
| · **UN proper shipping name** | |
| · **DOT** | Toxic solids, organic, n.o.s. (p,p'-DDE) |
| · **IMDG** | TOXIC SOLID, ORGANIC, N.O.S. (p,p'-DDE) |
| · **IATA** | Toxic solid, organic, n.o.s. (p,p'-DDE) |
| · **Transport hazard class(es)** | |
| · **DOT** |   |
| · **Class** | 6.1 Toxic substances |
| · **Label** | 6.1 |
| · **IMDG, IATA** |   |
| · **Class** | 6.1 Toxic substances |
| · **Label** | 6.1 |
| · **Packing group** | |
| · **DOT, IMDG, IATA** | III |
| · **Environmental hazards:** | Environmentally hazardous substance, solid |
| · **Special precautions for user** | Warning: Toxic substances |
| · **Hazard identification number (Kemler code):** | 60 |
| · **EMS Number:** | F-A,S-A |

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**Trade name: p,p'-DDE**

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| | |
|---|---|
| · **Stowage Category** | A |
| · **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** | Not applicable. |
| · **Transport/Additional information:** | |
| · **DOT** | |
| · **Quantity limitations** | On passenger aircraft/rail: 100 kg<br>On cargo aircraft only: 200 kg |
| · **Hazardous substance:** | 1 lbs, 0.454 kg |
| · **IMDG** | |
| · **Limited quantities (LQ)** | 5 kg |
| · **Excepted quantities (EQ)** | Code: E1<br>Maximum net quantity per inner packaging: 30 g<br>Maximum net quantity per outer packaging: 1000 g |
| · **IATA** | |
| · **Remarks:** | When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity. |
| · **UN "Model Regulation":** | UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (P,P'-DDE), 6.1, III, ENVIRONMENTALLY HAZARDOUS |

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
· **Sara**
· **Section 355 (extremely hazardous substances):** Substance is not listed.
· **Section 313 (Specific toxic chemical listings):** Substance is not listed.
· **TSCA (Toxic Substances Control Act):** Substance is not listed.
· **Hazardous Air Pollutants** Substance is not listed.
· **Proposition 65**
· **Chemicals known to cause cancer:** Substance is listed.
· **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
· **Chemicals known to cause reproductive toxicity for males:** Substance is listed.
· **Chemicals known to cause developmental toxicity:** Substance is listed.

· **Carcinogenic categories**
· **EPA (Environmental Protection Agency)** B2
· **TLV (Threshold Limit Value)** Substance is not listed.
· **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

All chemicals may pose unknown hazards and should be used with caution. This SDS applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. Cayman Chemical Company assumes no responsibility for incidental or consequential damages, including lost profits, arising from the use of

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# Safety Data Sheet
## acc. to OSHA HCS

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**Trade name: p,p'-DDE**

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these data. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Cayman Chemical Company assumes no responsibility for the completeness or accuracy of the information contained herein.

· **Department issuing SDS:** Environment protection department.
· **Contact:** -
· **Date of preparation / last revision** 01/15/2024
· **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Toxicity - Oral 3: Acute toxicity – Category 3
Carcinogenicity 2: Carcinogenicity – Category 2
Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
· *** Data compared to the previous version altered.**

# Safety Data Sheet
## acc. to OSHA HCS

Printing date 03/26/2019 Version Number 2 Reviewed on 03/26/2019

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## 1 Identification

· **Product identifier**

· **Trade name: p,p'-DDT**

· **Part number:** FRSP-180J
· **CAS Number:**
50-29-3
· **EC number:**
200-024-3
· **Index number:**
602-045-00-7
· **Application of the substance / the mixture** Reagents and Standards for Analytical Chemical Laboratory Use

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Agilent Technologies, Inc.
5301 Stevens Creek Blvd.
Santa Clara, CA 95051 USA

· **Information department:**
Telephone: 800-227-9770
e-mail: pdl-msds_author@agilent.com
· **Emergency telephone number:** CHEMTREC®: 1-800-424-9300

## 2 Hazard(s) identification

· **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.
Acute Tox. 3 H311 Toxic in contact with skin.



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.
STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.

· **Label elements**
· **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**



GHS06



GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
DDT (common name not adopted by ISO)
· **Hazard statements**
Toxic if swallowed or in contact with skin.

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Suspected of causing cancer.
Causes damage to organs through prolonged or repeated exposure.

· **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Immediately call a poison center/doctor.
Specific treatment (see on this label).
Rinse mouth.
If on skin: Wash with plenty of water.
IF exposed or concerned: Get medical advice/attention.
Call a poison center/doctor if you feel unwell.
Get medical advice/attention if you feel unwell.
Take off immediately all contaminated clothing and wash it before reuse.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**




Health = 2
Fire = 2
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**




Health = 2
Fire = 2
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· **Chemical characterization: Substances**
· **CAS No. Description**
50-29-3 DDT (common name not adopted by ISO)
· **Identification number(s)**
· **EC number:** 200-024-3
· **Index number:** 602-045-00-7



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# Safety Data Sheet
## acc. to OSHA HCS



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## 4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
In case of irregular breathing or respiratory arrest provide artificial respiration.
· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:** Do not induce vomiting; immediately call for medical help.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

## 5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
· **Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** Mount respiratory protective device.
· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
· **Protective Action Criteria for Chemicals**

| · **PAC-1:** |
|---|
| 3 mg/m³ |
| · **PAC-2:** |
| 34 mg/m³ |
| · **PAC-3:** |
| 210 mg/m³ |



(Contd. on page 4)

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## 7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
· **Information about protection against explosions and fires:** Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** No special requirements.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:** Keep receptacle tightly sealed.
· **Specific end use(s)** No further relevant information available.

* 

## 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

| · **Components with limit values that require monitoring at the workplace:** | |
|---|---|
| **50-29-3 DDT (common name not adopted by ISO)** | |
| PEL | Long-term value: 1 mg/m³<br>Skin |
| REL | Long-term value: 0.5 mg/m³<br>See Pocket Guide App. A |
| TLV | Long-term value: 1 mg/m³ |

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
· **Breathing equipment:**
When used as intended with Agilent instruments, the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.
Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device/equipment with appropriate organic or acid gas cartridge.
· **Protection of hands:**
Although not recommended for constant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.

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· **Material of gloves**
For normal use: nitrile rubber, 11-13 mil thickness
For direct contact with the chemical: butyl rubber, 12-15 mil thickness
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
· **Penetration time of glove material**
For normal use: nitrile rubber: 1 hour
For direct contact with the chemical: butyl rubber: >4 hours
· **Eye protection:**



Tightly sealed goggles

* 
## 9 Physical and chemical properties

| | |
|---|---|
| · **Information on basic physical and chemical properties** | |
| · **General Information** | |
| · **Appearance:** | |
| **Form:** | Solid |
| **Color:** | Not determined. |
| · **Odor:** | Characteristic |
| · **Odor threshold:** | Not determined. |
| · **pH-value:** | Not applicable. |
| · **Change in condition** | |
| **Melting point/Melting range:** | 107-110 °C (224.6-230 °F) |
| **Boiling point/Boiling range:** | 260 °C (500 °F) |
| · **Flash point:** | 72-77 °C (161.6-170.6 °F) |
| · **Flammability (solid, gaseous):** | Product is not flammable. |
| · **Decomposition temperature:** | Not determined. |
| · **Auto igniting:** | Not determined. |
| · **Danger of explosion:** | Product does not present an explosion hazard. |
| · **Explosion limits:** | |
| **Lower:** | Not determined. |
| **Upper:** | Not determined. |
| · **Vapor pressure at 20 °C (68 °F):** | 0.0000016 hPa (0 mm Hg) |
| · **Density at 20 °C (68 °F):** | 0.99 g/cm³ (8.26155 lbs/gal) |
| · **Relative density** | Not determined. |
| · **Vapor density** | Not applicable. |
| · **Evaporation rate** | Not applicable. |
| · **Solubility in / Miscibility with** | |
| **Water at 20 °C (68 °F):** | 0.0000012 g/l |
| · **Partition coefficient (n-octanol/water):** | Not determined. |

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# Safety Data Sheet
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| | |
|---|---|
| · **Viscosity:** | |
| **Dynamic:** | Not applicable. |
| **Kinematic:** | Not applicable. |
| **VOC content:** | 0.00 %<br>0.0 g/l / 0.00 lb/gal |
| **Solids content:** | 100.0 % |
| · **Other information** | No further relevant information available. |

## 10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

| **ATE (Acute Toxicity Estimate)** | | |
|---|---|---|
| Oral | LD50 | 87 mg/kg (rat) |
| Dermal | LD50 | 300 mg/kg (rabbit) |

| **50-29-3 DDT (common name not adopted by ISO)** | | |
|---|---|---|
| Oral | LD50 | 87 mg/kg (rat) |
| Dermal | LD50 | 2,510 mg/kg (rat) |
| | | 300 mg/kg (rabbit) |

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**

· **Carcinogenic categories**

| · **IARC (International Agency for Research on Cancer)** |
|---|
| 2A |

| · **NTP (National Toxicology Program)** |
|---|
| R |

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# Safety Data Sheet
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· **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

## 12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 3 (Assessment by list): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

* 
## 14 Transport information

· **UN-Number**
· **DOT, IMDG, IATA** UN2811

· **UN proper shipping name**
· **DOT** Toxic solids, organic, n.o.s. (DDT (common name not adopted by ISO))
· **IMDG, IATA** TOXIC SOLID, ORGANIC, N.O.S. (DDT (common name not adopted by ISO))

· **Transport hazard class(es)**

· **DOT, IMDG, IATA**



· **Class** 6.1 Toxic substances

(Contd. on page 8)

# Safety Data Sheet
## acc. to OSHA HCS



**Trade name: p,p'-DDT**

(Contd. of page 7)

| | |
|---|---|
| · **Label** | 6.1 |
| · **Packing group**<br>· **DOT, IMDG, IATA** | III |
| · **Environmental hazards:** | Not applicable. |
| · **Special precautions for user**<br>· **Danger code (Kemler):**<br>· **EMS Number:**<br>· **Stowage Category** | Warning: Toxic substances<br>60<br>F-A,S-A<br>A |
| · **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** | Not applicable. |
| · **Transport/Additional information:** | |
| · **DOT** | |
| · **Quantity limitations** | On passenger aircraft/rail: 100 kg<br>On cargo aircraft only: 200 kg |
| · **Hazardous substance:** | 1 lbs, 0.454 kg |
| · **IMDG** | |
| · **Limited quantities (LQ)** | 5 kg |
| · **Excepted quantities (EQ)** | Code: E1<br>Maximum net quantity per inner packaging: 30 g<br>Maximum net quantity per outer packaging: 1000 g |
| · **UN "Model Regulation":** | UN 2811 TOXIC SOLID, ORGANIC, N.O.S. (DDT (COMMON NAME NOT ADOPTED BY ISO)), 6.1, III, ENVIRONMENTALLY HAZARDOUS |

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

· **Section 355 (extremely hazardous substances):**
Substance is not listed.

· **Section 313 (Specific toxic chemical listings):**
Substance is not listed.

· **TSCA (Toxic Substances Control Act):**
Substance is listed.

· **TSCA new (21st Century Act): (Substances not listed)**

| | |
|---|---|
| 50-29-3 | DDT (common name not adopted by ISO) |

· **Proposition 65**

· **Chemicals known to cause cancer:**
Substance is listed.

· **Chemicals known to cause reproductive toxicity for females:**
Substance is listed.

(Contd. on page 9)

# Safety Data Sheet
## acc. to OSHA HCS



(Contd. of page 8)

· **Chemicals known to cause reproductive toxicity for males:**
Substance is listed.

· **Chemicals known to cause developmental toxicity:**
Substance is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
B2

· **TLV (Threshold Limit Value established by ACGIH)**
A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
Substance is listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

* 
## 16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

· **Date of preparation / last revision** 03/26/2019 / 1

· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Tox. 3: Acute toxicity – Category 3
Carc. 2: Carcinogenicity – Category 2
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

· *** Data compared to the previous version altered.**

# SAFETY DATA SHEET

Version 5.5
Revision Date 06/02/2016
Print Date 11/17/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : δ-BHC

Product Number : 48495
Brand : Supelco
Index-No. : 602-042-00-0

CAS-No. : 319-86-8

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Dermal (Category 4), H312
Carcinogenicity (Category 2), H351
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H301 Toxic if swallowed.
H312 Harmful in contact with skin.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

| | |
|---|---|
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. |
| P302 + P352 + P312 | IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/doctor if you feel unwell. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Synonyms : δ-1,2,3,4,5,6-Hexachlorocyclohexane

Formula : C6H6Cl6
Molecular weight : 290.8 g/mol
CAS-No. : 319-86-8
EC-No. : 206-272-9
Index-No. : 602-042-00-0

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **1α,2α,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane** | | |
| | Acute Tox. 3; Acute Tox. 4; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H301, H312, H351, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
No data available

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.
Hazardous components without workplace control parameters

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | No data available |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |

| | | |
|---|---|---|
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 1,000 mg/kg

Inhalation: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

IARC: 2B - Group 2B: Possibly carcinogenic to humans (1α,2α,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)

NTP: Reasonably anticipated to be a human carcinogen (1α,2α,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: GV4550000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Central nervous system -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - other fish - 2.83 mg/l - 96.0 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
Bioaccumulation other fish - 33 d
- 0.955 mg/l

Bioconcentration factor (BCF): 326

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (1α,2α,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)
Reportable Quantity (RQ): 1 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1α,2α,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)
Marine pollutant:yes

**IATA**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (1α,2α,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane)

**Further information**
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1α,2α,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane | 319-86-8 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1α,2α,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane | 319-86-8 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1α,2α,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane | 319-86-8 | 1993-04-24 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| 1α,2α,3α,4β,5α,6β)-1,2,3,4,5,6-Hexachlorocyclohexane | 319-86-8 | 2015-08-14 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |

| | |
|---|---|
| Carc. | Carcinogenicity |
| H301 | Toxic if swallowed. |
| H312 | Harmful in contact with skin. |
| H351 | Suspected of causing cancer. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 1 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.5 Revision Date: 06/02/2016 Print Date: 11/17/2016

# SAFETY DATA SHEET

Version 6.9
Revision Date 03/04/2024
Print Date 07/13/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Dibenz[*a*,*h*]anthracene

Product Number : 48574
Brand : Supelco
Index-No. : 601-041-00-2
CAS-No. : 53-70-3

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Carcinogenicity (Category 1B), H350
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410



The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word Danger

Hazard Statements

| | |
|---|---|
| H350 | May cause cancer. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary Statements

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : 1,2:5,6-Dibenzanthracene

Formula : $C_{22}H_{14}$
Molecular weight : 278.35 g/mol
CAS-No. : 53-70-3
EC-No. : 200-181-8
Index-No. : 601-041-00-2

| Component | Classification | Concentration |
|---|---|---|
| **Dibenz[a,h]anthracene** | | |
| | Carc. 1B; Aquatic Acute 1; Aquatic Chronic 1; H350, H400, H410<br>Concentration limits:<br>>= 0.01 %: Carc. 1B, H350;<br>M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 100 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.



The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Call in physician.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

**If swallowed**
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Water Foam Carbon dioxide (CO2) Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides
Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information
Prevent fire extinguishing water from contaminating surface water or the ground water system.



The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Work under hood. Do not inhale substance/mixture.

**Hygiene measures**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

**Storage class**
Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**



The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Dibenz[a,h]anthracene | 53-70-3 | PEL | 0.2 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| Dibenz[a,h]anthracene | 53-70-3 | 1-Hydroxypyrene | 2.5 µg/l | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | End of shift at end of workweek | | | |
| | | 3-hydroxybenzo(a)pyrene | | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | | End of shift at end of workweek | | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This



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recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
protective clothing

**Respiratory protection**
Recommended Filter type: Filter type P3
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 262 - 265 °C (504 - 509 °F) - lit. |
| f) | Initial boiling point and boiling range | 524 °C 975 °F - lit. |
| g) | Flash point | ()Not applicable |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | No data available |
| l) | Vapor density | No data available |
| m) | Density | No data available |
| | Relative density | No data available |
| n) | Water solubility | No data available |



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| | | |
|---|---|---|
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Autoignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | none |

**9.2 Other safety information**
No data available

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

**10.2 Chemical stability**
The product is chemically stable under standard ambient conditions (room temperature) .

**10.3 Possibility of hazardous reactions**
Violent reactions possible with:
strong oxidising agents

**10.4 Conditions to avoid**
no information available

**10.5 Incompatible materials**
No data available

**10.6 Hazardous decomposition products**
In the event of fire: see section 5

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Acute toxicity**
Oral: No data available
Inhalation: No data available
Dermal: No data available

**Skin corrosion/irritation**
No data available



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**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**
Presumed to have carcinogenic potential for humans

IARC: 2A - Group 2A: Probably carcinogenic to humans (Dibenz[a,h]anthracene)

NTP: RAHC - Reasonably anticipated to be a human carcinogen (Dibenz[a,h]anthracene)

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

RTECS: HN2625000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Lungs -

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 0.496 mg/l - 48 h<br>Remarks: (ECOTOX Database) |
| Toxicity to algae | NOEC - Raphidocelis subcapitata (freshwater green alga) - 0.00033 mg/l - 72 h<br>Remarks: (ECOTOX Database) |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available



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### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties
No data available

### 12.7 Other adverse effects
Discharge into the environment must be avoided.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Dibenz[a,h]anthracene)
Reportable Quantity (RQ): 1 lbs
Poison Inhalation Hazard: No

**IMDG**
UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dibenz[a,h]anthracene)
Marine pollutant : yes
Marine pollutant : no

**IATA**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Dibenz[a,h]anthracene)

**Further information**
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.



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## SECTION 15: Regulatory information

**SARA 302 Components**
This material does not contain any components with a section 302 EHS TPQ.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Dibenz[a,h]anthracene | 53-70-3 | 1993-02-16 |

**SARA 311/312 Hazards**
Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Dibenz[a,h]anthracene | 53-70-3 | 1993-02-16 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Dibenz[a,h]anthracene | 53-70-3 | 1993-02-16 |

**California Prop. 65 Components**

| | | |
|---|---|---|
| , which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.Dibenz[a,h]anthracene | CAS-No. 53-70-3 | Revision Date 2007-09-28 |

## SECTION 16: Other information

**Further information**
The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.
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Version: 6.9 Revision Date: 03/04/2024 Print Date: 07/13/2024



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# SAFETY DATA SHEET

Version 3.7
Revision Date 11/25/2014
Print Date 01/29/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Dibenzofuran

Product Number : 236373
Brand : Aldrich

CAS-No. : 132-64-9

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 4), H302
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)
H302 Harmful if swallowed.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P391 Collect spillage.
P501 Dispose of contents/ container to an approved waste disposal plant.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms : Diphenylene oxide

Formula : $C_{12}H_8O$
Molecular weight : 168.19 g/mol
CAS-No. : 132-64-9
EC-No. : 205-071-3

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Dibenzofuran** | | |
| | Acute Tox. 4; Aquatic Acute 2; Aquatic Chronic 2; H302, H411 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non Combustible Solids

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an

industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: crystalline<br>Colour: white, beige |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 80 - 82 °C (176 - 180 °F) - lit. |
| f) | Initial boiling point and boiling range | 154 - 155 °C (309 - 311 °F) at 27 hPa (20 mmHg) - lit. |
| g) | Flash point | 130.0 °C (266.0 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 3.77 |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
The preceding data, or interpretation of data, was determined using Quantitative Structure Activity Relationship (QSAR) modeling.

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: HP4430000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | NOEC - Cyprinodon variegatus (sheepshead minnow) - 1 mg/l - 96.0 h |
| | LC50 - Pimephales promelas (fathead minnow) - 1.05 mg/l - 96.0 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Dibenzofuran)
Reportable Quantity (RQ): 100 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Dibenzofuran)
Marine pollutant:yes

**IATA**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Dibenzofuran)

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|

| | | |
|---|---|---|
| Dibenzofuran | 132-64-9 | 2007-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Dibenzofuran | 132-64-9 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Dibenzofuran | 132-64-9 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Dibenzofuran | 132-64-9 | 2007-07-01 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| H302 | Harmful if swallowed. |
| H401 | Toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 1 |
| Chronic Health Hazard: | |
| Flammability: | 1 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 1 |
| Reactivity Hazard: | 0 |

**Further information**
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**
Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 3.7 Revision Date: 11/25/2014 Print Date: 01/29/2016

# SAFETY DATA SHEET

Version 3.11
Revision Date 03/03/2015
Print Date 05/01/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Dibutyl phthalate

Product Number : 152439
Brand : Aldrich
Index-No. : 607-318-00-4

CAS-No. : 84-74-2

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Reproductive toxicity (Category 1B), H360
Acute aquatic toxicity (Category 1), H400

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H360 May damage fertility or the unborn child.
H400 Very toxic to aquatic life.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P273 Avoid release to the environment.
P281 Use personal protective equipment as required.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P391 Collect spillage.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Synonyms | : | n-Butyl phthalate<br>Phthalic acid dibutyl ester<br>DBP |
| Formula | : | $C_{16}H_{22}O_4$ |
| Molecular weight | : | 278.34 g/mol |
| CAS-No. | : | 84-74-2 |
| EC-No. | : | 201-557-4 |
| Index-No. | : | 607-318-00-4 |
| Registration number | : | 01-2119493042-44-XXXX |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Dibutyl phthalate** Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH) | | |
| | Repr. 1B; Aquatic Acute 1; H360, H400 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Dibutyl phthalate | 84-74-2 | TWA | 5.000000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Upper Respiratory Tract irritation<br>Eye irritation<br>Testicular damage | | |
| | | TWA | 5 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Eye irritation<br>Testicular damage | | |
| | | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 5.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 480 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

Splash contact
Material: Nature latex/chloroprene
Minimum layer thickness: 0.6 mm
Break through time: 120 min
Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid, clear<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -35 °C (-31 °F) - lit. |
| f) | Initial boiling point and boiling range | 340 °C (644 °F) - lit. |
| g) | Flash point | 171.0 °C (339.8 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower | Lower explosion limit: 0.47 %(V) |

| | | |
|---|---|---|
| | flammability or explosive limits | |
| k) | Vapour pressure | 1.3 hPa (1.0 mmHg) at 147.0 °C (296.6 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 1.043 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | 0.0114 g/l at 25 °C (77 °F) - OECD Test Guideline 105 - slightly soluble |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | 402.0 °C (755.6 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | 18.8 mm2/s at 20 °C (68 °F) - |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents, Nitrates, Bases, acids, Chlorine

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 8,000 mg/kg

LC50 Inhalation - Rat - 4,250 mg/m3

LD50 Dermal - Rabbit - > 20,860 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: No skin irritation
(OECD Test Guideline 404)

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: No eye irritation
(OECD Test Guideline 405)

**Respiratory or skin sensitisation**
Maximisation Test (GPMT) - Guinea pig
Result: Does not cause skin sensitisation.
(OECD Test Guideline 406)

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
Presumed human reproductive toxicant

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: TI0875000

Nausea, Dizziness, Headache, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Central nervous system -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Pimephales promelas (fathead minnow) - 0.85 mg/l - 96.0 h |
| | NOEC - Pimephales promelas (fathead minnow) - 0.32 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | LC50 - Daphnia magna (Water flea) - 3.7 mg/l - 48 h |

### 12.2 Persistence and degradability

| | |
|---|---|
| Biodegradability | Result: 81 % - Readily biodegradable<br>(C.4-C of the COUNCIL REGULATION (EC) No 440/2008) |

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Pimephales promelas (fathead minnow) - 11 d<br>- 0.0348 mg/l<br><br>Bioconcentration factor (BCF): 2,165<br>Remarks: Does not bioaccumulate. |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life.

No data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**

UN number: 3082 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Dibutyl phthalate)
Reportable Quantity (RQ): 10 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**

UN number: 3082 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Dibutyl phthalate)
Marine pollutant:yes

**IATA**

UN number: 3082 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Dibutyl phthalate)

## 15. REGULATORY INFORMATION

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Dibutyl phthalate | 84-74-2 | 2007-07-01 |

**SARA 311/312 Hazards**

Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Dibutyl phthalate | 84-74-2 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Dibutyl phthalate | 84-74-2 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Dibutyl phthalate | 84-74-2 | 2007-07-01 |

**California Prop. 65 Components**

| | CAS-No. | Revision Date |
|---|---|---|
| WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. | 84-74-2 | 2008-06-17 |
| Dibutyl phthalate | | |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| H360 | May damage fertility or the unborn child. |
| H400 | Very toxic to aquatic life. |
| Repr. | Reproductive toxicity |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 1 |
| Chronic Health Hazard: | * |
| Flammability: | 1 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 1 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 3.11 Revision Date: 03/03/2015 Print Date: 05/01/2016

# SAFETY DATA SHEET

Version 5.5
Revision Date 02/28/2015
Print Date 02/09/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Dieldrin

Product Number : 291218
Brand : Aldrich
Index-No. : 602-049-00-9

CAS-No. : 60-57-1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 2), H300
Acute toxicity, Dermal (Category 3), H311
Carcinogenicity (Category 2), H351
Specific target organ toxicity - repeated exposure, Oral (Category 1), H372
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H300 Fatal if swallowed.
H311 Toxic in contact with skin.
H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure if swallowed.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.

| | |
|---|---|
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing. |
| P281 | Use personal protective equipment as required. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. |
| P302 + P352 + P312 | IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P361 | Remove/Take off immediately all contaminated clothing. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Synonyms : 1,2,3,4,10,10-Hexachloro-1,4,4a,5,6,7,8,8a-octahydro-6,7-epoxy-1,4:5,8-dimethanonaphthalene

Formula : $C_{12}H_8Cl_6O$

Molecular weight : 380.91 g/mol

CAS-No. : 60-57-1

EC-No. : 200-484-5

Index-No. : 602-049-00-9

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Dieldrin** | | |
| | Acute Tox. 2; Acute Tox. 3; Carc. 2; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H300, H311, H351, H372, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides, Hydrogen chloride gas

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Dieldrin | 60-57-1 | TWA | 0.100000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Central Nervous System impairment<br>Liver damage<br>Reproductive effects<br>Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |

| | | | | |
|---|---|---|---|---|
| | | TWA | 0.250000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix A<br>Potential for dermal absorption | | |
| | | TWA | 0.250000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Skin designation | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |

| | | |
|---|---|---|
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 143 - 144 °C (289 - 291 °F) |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Mouse - 38.0 mg/kg

LD50 Oral - Dog - 65.0 mg/kg

LD50 Oral - Monkey - 3.0 mg/kg

LD50 Oral - Rabbit - 45.0 mg/kg

LD50 Oral - Pig - 38.0 mg/kg

LD50 Oral - Guinea pig - 49.0 mg/kg

LD50 Oral - Hamster - 60.0 mg/kg

LD50 Oral - Pigeon - 23.7 mg/kg

LD50 Oral - Chicken - 20.0 mg/kg
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Miosis (pupilliary constriction). Behavioral:Excitement. Behavioral:Food intake (animal).

LD50 Oral - Quail - 10.8 mg/kg
Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Somnolence (general depressed activity). Behavioral:Irritability.

LD50 Oral - Duck - 381.0 mg/kg

LD50 Oral - Mammal - 94.0 mg/kg
Remarks: Peripheral Nerve and Sensation:Flaccid paralysis without anesthesia (usually neuromuscular blockage). Behavioral:Tremor. Behavioral:Convulsions or effect on seizure threshold.

LD50 Oral - Bird (wild) - 13.3 mg/kg

LDLO Oral - Rat - 30.0 mg/kg
Remarks: Liver:Other changes.

LDLO Oral - Human - male - 65.0 mg/kg

LDLO Oral - Cat - 500 mg/kg
Remarks: Lungs, Thorax, or Respiration:Chronic pulmonary edema. Liver:Fatty liver degeneration. Kidney, Ureter, Bladder:Other changes.

TDLo Oral - Rat - 140 mg/kg
Remarks: Liver:Other changes. Blood:Other changes. Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels: Other esterases.

TDLo Oral - Rat - 109 mg/kg
Remarks: Liver:Changes in liver weight.

TDLo Oral - Rat - 88 mg/kg
Remarks: Behavioral:Food intake (animal). Nutritional and Gross Metabolic:Weight loss or decreased weight gain. Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels: Phosphatases.

Inhalation: No data available

LD50 Dermal - Rabbit - 250.0 mg/kg

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Dieldrin)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
Ingestion - Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard**
No data available

**Additional Information**
RTECS: IO1750000

Discomfort, Headache, Nausea, Vomiting, Dizziness, Tremors, tonic convulsions, clonic spasms, Coma., respiratory failure, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Blood - Irregularities - Based on Human Evidence
Blood - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | mortality LC50 - Carassius auratus (goldfish) - 1.6 µg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | Immobilization EC50 - Daphnia magna (Water flea) - 79.5 µg/l - 48 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2811 Class: 6.1 Packing group: I
Proper shipping name: Toxic solids, organic, n.o.s. (Dieldrin)
Reportable Quantity (RQ): 1 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 2811 Class: 6.1 Packing group: I EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Dieldrin)
Marine pollutant:yes

**IATA**
UN number: 2811 Class: 6.1 Packing group: I
Proper shipping name: Toxic solid, organic, n.o.s. (Dieldrin)
IATA Passenger: Not permitted for transport

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Dieldrin | 60-57-1 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Dieldrin | 60-57-1 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Dieldrin | 60-57-1 | 1993-04-24 |

**California Prop. 65 Components**

| | | |
|---|---|---|
| WARNING! This product contains a chemical known to the State of California to cause cancer. Dieldrin | CAS-No. 60-57-1 | Revision Date 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H300 | Fatal if swallowed. |
| H311 | Toxic in contact with skin. |
| H351 | Suspected of causing cancer. |
| H372 | Causes damage to organs through prolonged or repeated exposure if swallowed. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 4 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.5 Revision Date: 02/28/2015 Print Date: 02/09/2016

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** **DIESEL FUELS**

**Other means of identification**

**SDS number** 102-GHS

**Synonyms** Diesel Fuels All Grades, Diesel Fuel No.2, Fuel Oil No.2, High Sulfur Diesel Fuel, Low Sulfur Diesel Fuel, Ultra Low Sulfur Diesel Fuel, CARB (California Air Resource Board) Diesel Fuel, Off-Road Diesel Fuel, Dyed Diesel Fuel, X Grade Diesel Fuel, X-1 Diesel Fuel, R5 ULSD, B5 ULS D See section 16 for complete information.

**Recommended use** Motor Fuel
Refinery feedstock.

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer/Supplier** Valero Marketing & Supply Company and Affiliates
One Valero Way
San Antonio, TX 78269-6000

**General Assistance** 210-345-4593

**E-Mail** CorpHSE@valero.com

**Contact Person** Industrial Hygienist

**Emergency Telephone** 24 Hour Emergency 866-565-5220
1-800-424-9300 (CHEMTREC USA)

## 2. Hazard(s) identification

| | | |
|---|---|---|
| **Physical hazards** | Flammable liquids | Category 3 |
| **Health hazards** | Acute toxicity, inhalation | Category 4 |
| | Skin corrosion/irritation | Category 2 |
| | Carcinogenicity | Category 2 |
| | Reproductive toxicity | Category 2 |
| | Specific target organ toxicity, repeated exposure | Category 2 |
| | Aspiration hazard | Category 1 |
| **Environmental hazards** | Hazardous to the aquatic environment, long-term hazard | Category 2 |

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Flammable liquid and vapor. Harmful if inhaled. Causes skin irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure. May be fatal if swallowed and enters airways.

**Precautionary statement**

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Do not breathe mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area.

| | |
|---|---|
| **Response** | If skin irritation occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If exposed or concerned: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Take off contaminated clothing and wash before reuse. In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction. |
| **Storage** | Store locked up. Store in a well-ventilated place. Keep cool. |
| **Disposal** | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| **Hazard(s) not otherwise classified (HNOC)** | None known. |

## 3. Composition/information on ingredients

**Mixtures**

| Chemical name | CAS number | % |
|---|---|---|
| Fuels, diesel, no. 2 | 68476-34-6 | 85 - 100 |
| Biodiesel - Fatty acid methyl esters | 67762-38-3 | 0 - 10 |
| Fuels, diesel, C9-18-alkane branched and linear | 1159170-26-9 | 0 - 5 |
| n-Nonane | 111-84-2 | 1 - 3 |
| Octane (All isomers) | 111-65-9 | 1 - 2 |
| Hexane (Other isomers) | 96-14-0 | 0 - 1 |
| Naphthalene | 91-20-3 | 0 - 1 |
| n-Heptane | 142-82-5 | 0 - 1 |
| n-Hexane | 110-54-3 | 0 - 1 |

## 4. First-aid measures

| | |
|---|---|
| **Inhalation** | Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention. |
| **Skin contact** | Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention. |
| **Eye contact** | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention. |
| **Ingestion** | Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Do not give mouth-to-mouth resuscitation. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately. |
| **Most important symptoms/effects, acute and delayed** | Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash. The toxicological properties of this product have not been thoroughly investigated. Use appropriate precautions.<br>Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere. |
| **Indication of immediate medical attention and special treatment needed** | In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. The toxicological properties of this material have not been fully investigated. |
| **General information** | If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. |

## 5. Fire-fighting measures

| | |
|---|---|
| **Suitable extinguishing media** | Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). |

| | |
|---|---|
| **Unsuitable extinguishing media** | Do not use a solid water stream as it may scatter and spread fire. |
| **Specific hazards arising from the chemical** | The product is flammable, and heating may generate vapors which may form explosive vapor/air mixtures. Thermal decomposition or combustion may liberate toxic gases or fumes. |
| **Special protective equipment and precautions for firefighters** | Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. |
| **Fire-fighting equipment/instructions** | Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed. |

## 6. Accidental release measures

| | |
|---|---|
| **Personal precautions, protective equipment and emergency procedures** | Keep unnecessary personnel away. Local authorities should be advised if significant spills cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment. |
| **Methods and materials for containment and cleaning up** | Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Local authorities should be advised if significant spillages cannot be contained. Stop leak if you can do so without risk. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.<br><br>Use non-sparking tools and explosion-proof equipment.<br><br>Small Spills: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste.<br><br>Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Do not allow material to contaminate ground water system. Should not be released into the environment.<br><br>Clean up in accordance with all applicable regulations. |
| **Environmental precautions** | If facility or operation has an "oil or hazardous substance contingency plan", activate its procedures. Stay upwind and away from spill. Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not enter or stay in area unless monitoring indicates that it is safe to do so. Isolate hazard area and restrict entry to emergency crew. Flammable. Review Firefighting Measures, Section 5, before proceeding with clean up. Keep all sources of ignition (flames, smoking, flares, etc.) and hot surfaces away from release. Contain spill in smallest possible area. Recover as much product as possible (e.g. by vacuuming). Stop leak if it can be done without risk. Use water spray to disperse vapors. Use compatible foam to minimize vapor generation as needed. Spilled material may be absorbed by an appropriate absorbent, and then handled in accordance with environmental regulations. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment or drainage systems and natural waterways. Contact fire authorities and appropriate federal, state and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, contact the National Response Center at 1-800-424-8802. For highway or railways spills, contact Chemtrec at 1-800-424-9300. |

## 7. Handling and storage

| | |
|---|---|
| **Precautions for safe handling** | Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity.<br>Wear personal protective equipment. Avoid breathing mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. When using, do not eat, drink or smoke. Avoid release to the environment. |

| | |
|---|---|
| **Conditions for safe storage, including any incompatibilities** | Flammable liquid storage. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children. |

## 8. Exposure controls/personal protection

**Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components | Type | Value |
|---|---|---|
| Naphthalene (CAS 91-20-3) | PEL | 50 mg/m3 |
| | | 10 ppm |
| n-Heptane (CAS 142-82-5) | PEL | 2000 mg/m3 |
| | | 500 ppm |
| n-Hexane (CAS 110-54-3) | PEL | 1800 mg/m3 |
| | | 500 ppm |
| Octane (All isomers) (CAS 111-65-9) | PEL | 2350 mg/m3 |
| | | 500 ppm |

**US. ACGIH Threshold Limit Values**

| Components | Type | Value | Form |
|---|---|---|---|
| Fuels, diesel, no. 2 (CAS 68476-34-6) | TWA | 100 mg/m3 | Inhalable fraction and vapor. |
| Hexane (Other isomers) (CAS 96-14-0) | STEL | 1000 ppm | |
| | TWA | 500 ppm | |
| Naphthalene (CAS 91-20-3) | STEL | 15 ppm | |
| | TWA | 10 ppm | |
| n-Heptane (CAS 142-82-5) | STEL | 500 ppm | |
| | TWA | 400 ppm | |
| n-Hexane (CAS 110-54-3) | TWA | 50 ppm | |
| n-Nonane (CAS 111-84-2) | TWA | 200 ppm | |
| Octane (All isomers) (CAS 111-65-9) | TWA | 300 ppm | |

**US. NIOSH: Pocket Guide to Chemical Hazards**

| Components | Type | Value |
|---|---|---|
| Hexane (Other isomers) (CAS 96-14-0) | Ceiling | 1800 mg/m3 |
| | | 510 ppm |
| | TWA | 350 mg/m3 |
| | | 100 ppm |
| Naphthalene (CAS 91-20-3) | STEL | 75 mg/m3 |
| | | 15 ppm |
| | TWA | 50 mg/m3 |
| | | 10 ppm |
| n-Heptane (CAS 142-82-5) | Ceiling | 1800 mg/m3 |
| | | 440 ppm |
| | TWA | 350 mg/m3 |
| | | 85 ppm |
| n-Hexane (CAS 110-54-3) | TWA | 180 mg/m3 |
| | | 50 ppm |
| n-Nonane (CAS 111-84-2) | TWA | 1050 mg/m3 |
| | | 200 ppm |
| Octane (All isomers) (CAS 111-65-9) | Ceiling | 1800 mg/m3 |
| | | 385 ppm |
| | TWA | 350 mg/m3 |
| | | 75 ppm |

**Biological limit values**

**ACGIH Biological Exposure Indices**

| Components | Value | Determinant | Specimen | Sampling Time |
|---|---|---|---|---|
| n-Hexane (CAS 110-54-3) | 0.4 mg/l | 2,5-Hexanedion, without hydrolysis | Urine | * |
| | 0.4 mg/l | 2,5-Hexanedi - on, without hydrolysis | | * |

* - For sampling details, please see the source document.

**Exposure guidelines**

**US - California OELs: Skin designation**

n-Hexane (CAS 110-54-3) Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

Fuels, diesel, no. 2 (CAS 68476-34-6) Can be absorbed through the skin.
Naphthalene (CAS 91-20-3) Can be absorbed through the skin.
n-Hexane (CAS 110-54-3) Can be absorbed through the skin.

**Appropriate engineering controls** Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.

**Skin protection**

**Hand protection** Wear chemical-resistant, impervious gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.

**Other** Full body suit and boots are recommended when handling large volumes or in emergency situations. Flame retardant protective clothing is recommended.

**Respiratory protection** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workplace exposure limits for product or components are exceeded, NIOSH approved equipment should be worn. Proper respirator selection should be determined by adequately trained personnel, based on the contaminants, the degree of potential exposure and published respiratory protection factors. This equipment should be available for nonroutine and emergency use.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** Consult supervisor for special handling instructions. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

**Appearance** Liquid (may be dyed red).

**Physical state** Liquid.

**Form** Liquid.

**Color** Clear. Straw.

**Odor** Kerosene (strong).

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** -60.07 °F (-51.15 °C) Estimated

**Initial boiling point and boiling range** 325 - 700 °F (162.78 - 371.11 °C)

**Flash point** > 100.0 °F (> 37.8 °C) Closed Cup

**Evaporation rate** 0.02

**Flammability (solid, gas)** Not available.

**Upper/lower flammability or explosive limits**

| | |
|---|---|
| **Flammability limit - lower (%)** | 0.4 % |
| **Flammability limit - upper (%)** | 8 % |
| **Explosive limit - lower (%)** | Not available. |
| **Explosive limit - upper (%)** | Not available. |
| **Vapor pressure** | < 1 mm Hg (20°C) |
| **Vapor density** | 3 (Air = 1) |
| **Relative density** | 0.82 - 0.87 |
| **Relative density temperature** | 60 °F (15.56 °C) |
| **Solubility(ies)** | |
| **Solubility (water)** | Not available. |
| **Partition coefficient (n-octanol/water)** | Not available. |
| **Auto-ignition temperature** | 494.96 °F (257.2 °C) |
| **Decomposition temperature** | Not available. |
| **Viscosity** | 2 - 4.5 mm²/s |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | Stable at normal conditions. |
| **Chemical stability** | Stable under normal temperature conditions and recommended use. |
| **Possibility of hazardous reactions** | Hazardous polymerization does not occur. |
| **Conditions to avoid** | Heat, flames and sparks. Ignition sources. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death. |
| **Incompatible materials** | Strong oxidizing agents. |
| **Hazardous decomposition products** | No hazardous decomposition products are known. |

## 11. Toxicological information

**Information on likely routes of exposure**

| | |
|---|---|
| **Ingestion** | May be fatal if swallowed and enters airways. |
| **Inhalation** | Harmful if inhaled. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. |
| **Skin contact** | Causes skin irritation. |
| **Eye contact** | May cause eye irritation. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash. The toxicological properties of this product have not been thoroughly investigated. Use appropriate precautions. |

**Information on toxicological effects**

| | |
|---|---|
| **Acute toxicity** | Harmful if inhaled. Harmful: may cause lung damage if swallowed. The toxicological properties of this material have not been fully investigated. |

| **Components** | **Species** | **Test Results** |
|---|---|---|
| Fuels, diesel, no. 2 (CAS 68476-34-6) | | |
| **Acute** | | |
| *Inhalation* | | |
| LC50 | Rat | 4.1 mg/l, 4 hours |

| Components | Species | Test Results |
|---|---|---|
| Naphthalene (CAS 91-20-3) | | |
| **Acute** | | |
| *Dermal* | | |
| LD50 | Rabbit | > 2 g/kg |
| *Oral* | | |
| LD50 | Rat | 490 mg/kg |
| n-Heptane (CAS 142-82-5) | | |
| **Acute** | | |
| *Inhalation* | | |
| LC50 | Rat | 103 mg/l, 4 Hours |
| n-Hexane (CAS 110-54-3) | | |
| **Acute** | | |
| *Oral* | | |
| LD50 | Rat | 28710 mg/kg |
| n-Nonane (CAS 111-84-2) | | |
| **Acute** | | |
| *Inhalation* | | |
| LC50 | Rat | 3200 mg/l, 4 Hours |
| Octane (All isomers) (CAS 111-65-9) | | |
| **Acute** | | |
| *Inhalation* | | |
| LC50 | Rat | 118 mg/l, 4 Hours |

**Skin corrosion/irritation** Causes skin irritation.

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

**Respiratory or skin sensitization**

**Respiratory sensitization** Based on available data, the classification criteria are not met.

**Skin sensitization** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**Carcinogenicity** Suspected of causing cancer.
International Agency for Research on Cancer (IARC): Whole diesel engine exhaust – IARC Group 1. Exposure may cause lung cancer and also noted a positive association with an increased risk of bladder cancer.
Diesel exhaust has been reported to be an occupational hazard due to NIOSH-reported potential carcinogenic properties.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

| | |
|---|---|
| Fuels, diesel, no. 2 (CAS 68476-34-6) | 3 Not classifiable as to carcinogenicity to humans. |
| Naphthalene (CAS 91-20-3) | 2B Possibly carcinogenic to humans. |

**NTP Report on Carcinogens**

| | |
|---|---|
| Naphthalene (CAS 91-20-3) | Reasonably Anticipated to be a Human Carcinogen. |

**Reproductive toxicity** Suspected of damaging fertility or the unborn child.
Napthalene interferes with embryo development in experimental animals at dose levels that cause maternal toxicity. In humans, excessive exposure to this agent may cause hemolytic anemia in the mother and fetus.

**Specific target organ toxicity - single exposure** Based on available data, the classification criteria are not met.

**Specific target organ toxicity - repeated exposure** May cause damage to the following organs through prolonged or repeated exposure: Blood. Liver. Thymus.

**Aspiration hazard** May be fatal if swallowed and enters airways.

**Chronic effects** Contains organic solvents which in case of overexposure may depress the central nervous system causing dizziness and intoxication. Repeated exposure to naphthalene may cause cataracts, allergic skin rashes, destruction of red blood cells, and anemia, jaundice, kidney and liver damage. Danger of serious damage to health by prolonged exposure. Prolonged or repeated overexposure may cause central nervous system, kidney, liver, and lung damage.

**Further information** Symptoms may be delayed. Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere. Toxicological properties of this material have not been fully investigated.

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| Components | | Species | Test Results |
|---|---|---|---|
| Fuels, diesel, no. 2 (CAS 68476-34-6) | | | |
| **Aquatic** | | | |
| *Acute* | | | |
| Crustacea | EL50 | Daphnia magna | 68 mg/l, 48 hours |
| Fish | LL50 | Oncorhynchus mykiss | 65 mg/l, 96 hours |
| Naphthalene (CAS 91-20-3) | | | |
| **Aquatic** | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 1.09 - 3.4 mg/l, 48 hours |
| Fish | LC50 | Pink salmon (Oncorhynchus gorbuscha) | 0.95 - 1.62 mg/l, 96 hours |
| n-Heptane (CAS 142-82-5) | | | |
| **Aquatic** | | | |
| Fish | LC50 | Western mosquitofish (Gambusia affinis) | 4924 mg/l, 96 hours |
| n-Hexane (CAS 110-54-3) | | | |
| **Aquatic** | | | |
| Fish | LC50 | Fathead minnow (Pimephales promelas) | 2.101 - 2.981 mg/l, 96 hours |

**Persistence and degradability** Not available.

**Bioaccumulative potential** Not available.

**Partition coefficient n-octanol / water (log Kow)**

| | |
|---|---|
| Hexane (Other isomers) (CAS 96-14-0) | 3.6 |
| Octane (All isomers) (CAS 111-65-9) | 5.18 |
| n-Heptane (CAS 142-82-5) | 4.66 |
| n-Hexane (CAS 110-54-3) | 3.9 |
| n-Nonane (CAS 111-84-2) | 5.46 |

**Mobility in soil** Not available.

**Other adverse effects** Not available.

## 13. Disposal considerations

**Disposal instructions** Dispose in accordance with all applicable regulations. This material and its container must be disposed of as hazardous waste. Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.

**Hazardous waste code** D001: Waste Flammable material with a flash point <140 °F

**US RCRA Hazardous Waste U List: Reference**

| | |
|---|---|
| Naphthalene (CAS 91-20-3) | U165 |

**Waste from residues / unused products** Dispose of in accordance with local regulations.

**Contaminated packaging** Offer rinsed packaging material to local recycling facilities.

## 14. Transport information

**DOT**

**UN number** UN1202

**UN proper shipping name** Diesel fuel

**Transport hazard class(es)**

**Class** Combustible Liquid

**Subsidiary risk** -

**Packing group** III

**Environmental hazards**

| | |
|---|---|
| **Marine pollutant** | Yes |
| **Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |
| **Special provisions** | 144, B1, IB3, T2, TP1 |
| **Packaging exceptions** | 150 |
| **Packaging non bulk** | 203 |
| **Packaging bulk** | 242 |

**IATA**

| | |
|---|---|
| **UN number** | UN1202 |
| **UN proper shipping name** | Diesel fuel |
| **Transport hazard class(es)** | |
| **Class** | 3 |
| **Subsidiary risk** | - |
| **Label(s)** | 3 |
| **Packing group** | III |
| **Environmental hazards** | Yes |
| **ERG Code** | 3L |
| **Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |

**IMDG**

| | |
|---|---|
| **UN number** | UN1202 |
| **UN proper shipping name** | DIESEL FUEL |
| **Transport hazard class(es)** | |
| **Class** | 3 |
| **Subsidiary risk** | - |
| **Label(s)** | 3 |
| **Packing group** | III |
| **Environmental hazards** | |
| **Marine pollutant** | Yes |
| **EmS** | F-E, S-E |
| **Special precautions for user** | Read safety instructions, SDS and emergency procedures before handling. |

| | |
|---|---|
| **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** | Not applicable. However, this product is a liquid and if transported in bulk covered under MARPOL 73/78, Annex I. |

## 15. Regulatory information

**US federal regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

| | |
|---|---|
| n-Nonane (CAS 111-84-2) | 1.0 % One-Time Export Notification only. |

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

| | |
|---|---|
| Hexane (Other isomers) (CAS 96-14-0) | LISTED |
| Naphthalene (CAS 91-20-3) | LISTED |
| n-Heptane (CAS 142-82-5) | LISTED |
| n-Hexane (CAS 110-54-3) | LISTED |
| n-Nonane (CAS 111-84-2) | LISTED |
| Octane (All isomers) (CAS 111-65-9) | LISTED |

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

| | |
|---|---|
| **Hazard categories** | Immediate Hazard - No<br>Delayed Hazard - No<br>Fire Hazard - No<br>Pressure Hazard - No<br>Reactivity Hazard - No |

**SARA 302 Extremely hazardous substance**

Not listed.

| | |
|---|---|
| **SARA 311/312 Hazardous chemical** | Yes |

**SARA 313 (TRI reporting)**

| Chemical name | CAS number | % by wt. |
|---|---|---|
| Naphthalene | 91-20-3 | 0 - 1 |

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Naphthalene (CAS 91-20-3)
n-Hexane (CAS 110-54-3)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations** WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Hexane (Other isomers) (CAS 96-14-0)
Naphthalene (CAS 91-20-3)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
n-Nonane (CAS 111-84-2)
Octane (All isomers) (CAS 111-65-9)

**US. New Jersey Worker and Community Right-to-Know Act**

Fuels, diesel, no. 2 (CAS 68476-34-6)
Naphthalene (CAS 91-20-3)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
n-Nonane (CAS 111-84-2)
Octane (All isomers) (CAS 111-65-9)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Fuels, diesel, no. 2 (CAS 68476-34-6)
Hexane (Other isomers) (CAS 96-14-0)
Naphthalene (CAS 91-20-3)
n-Heptane (CAS 142-82-5)
n-Hexane (CAS 110-54-3)
n-Nonane (CAS 111-84-2)
Octane (All isomers) (CAS 111-65-9)

**US. Rhode Island RTK**

Naphthalene (CAS 91-20-3)
n-Hexane (CAS 110-54-3)

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Benzene (CAS 71-43-2)
Toluene (CAS 108-88-3)

**International Inventories**

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| Australia | Australian Inventory of Chemical Substances (AICS) | No |
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|---|---|---|
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

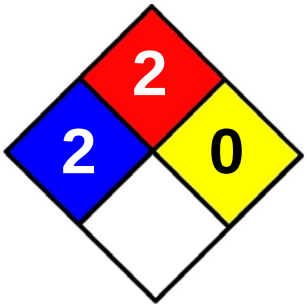
**Issue date** 13-May-2013

**Revision date** 23-May-2014

**Version #** 04

**Further information** HMIS® is a registered trade and service mark of the NPCA.

**NFPA Ratings**

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# SAFETY DATA SHEET

Version 4.8
Revision Date 06/09/2016
Print Date 11/14/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Endosulfan I (alpha)

Product Number : 48576
Brand : Supelco

CAS-No. : 959-98-8

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 2), H300
Acute toxicity, Inhalation (Category 2), H330
Acute toxicity, Dermal (Category 4), H312
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H300 + H330 Fatal if swallowed or if inhaled
H312 Harmful in contact with skin.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.

| | |
|---|---|
| P280 | Wear protective gloves/ protective clothing. |
| P284 | Wear respiratory protection. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. |
| P302 + P352 + P312 | IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/doctor if you feel unwell. |
| P304 + P340 + P310 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | C9H6Cl6O3S |
| Molecular weight | : | 406.93 g/mol |
| CAS-No. | : | 959-98-8 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Endosulfan (α isomer)** | | |
| | Acute Tox. 2; Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 1; H300 + H330, H312, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
No data available

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.
Hazardous components without workplace control parameters

**8.2 Exposure controls**

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm

Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: crystalline<br>Colour: white |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | 108.0 - 110.0 °C (226.4 - 230.0 °F) |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | insoluble |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |

| | | |
|---|---|---|
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides, Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
No data available

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

| | |
|---|---|
| IARC: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
Bioaccumulation other fish - 21 d
- 0.2 µg/l

Bioconcentration factor (BCF): 10,994

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

No data available

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solids, organic, n.o.s. (Endosulfan (α isomer))
Reportable Quantity (RQ): 1 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Endosulfan (α isomer))

**IATA**

UN number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solid, organic, n.o.s. (Endosulfan (α isomer))

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Endosulfan (α isomer) | 959-98-8 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Endosulfan (α isomer) | 959-98-8 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Endosulfan (α isomer) | 959-98-8 | 1993-04-24 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| H300 | Fatal if swallowed. |
| H300 + H330 | Fatal if swallowed or if inhaled |
| H312 | Harmful in contact with skin. |
| H330 | Fatal if inhaled. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 4 |
| Chronic Health Hazard: | |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 4 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**
Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.8 Revision Date: 06/09/2016 Print Date: 11/14/2016

# SAFETY DATA SHEET

Version 5.1
Revision Date 06/27/2014
Print Date 04/20/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Endosulfan sulfate

Product Number : 36676
Brand : Sigma

CAS-No. : 1031-07-8

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 2), H300
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H300 Fatal if swallowed.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P321 Specific treatment (see supplemental first aid instructions on this label).
P330 Rinse mouth.
P391 Collect spillage.
P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Formula : $C_9H_6Cl_6O_4S$
Molecular Weight : 422.92 g/mol
CAS-No. : 1031-07-8

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Endosulfan sulfate** | | |
| | Acute Tox. 2; Aquatic Acute 1; Aquatic Chronic 1; H300, H410 | - |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
no data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Sulphur oxides

**5.3 Advice for firefighters**
Wear self contained breathing apparatus for fire fighting if necessary.

**5.4 Further information**
no data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odour | no data available |
| c) | Odour Threshold | no data available |
| d) | pH | no data available |
| e) | Melting point/freezing point | 179.0 - 182.0 °C (354.2 - 359.6 °F) |
| f) | Initial boiling point and boiling range | no data available |
| g) | Flash point | no data available |
| h) | Evapouration rate | no data available |
| i) | Flammability (solid, gas) | no data available |
| j) | Upper/lower flammability or explosive limits | no data available |
| k) | Vapour pressure | no data available |
| l) | Vapour density | no data available |
| m) | Relative density | no data available |
| n) | Water solubility | insoluble |
| o) | Partition coefficient: n-octanol/water | log Pow: 3.66 |
| p) | Auto-ignition temperature | no data available |
| q) | Decomposition temperature | no data available |
| r) | Viscosity | no data available |
| s) | Explosive properties | no data available |
| t) | Oxidizing properties | no data available |

### 9.2 Other safety information
no data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity
no data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
no data available

**10.4 Conditions to avoid**
no data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - no data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - rat - 18.0 mg/kg

Inhalation: no data available

Dermal: no data available

no data available

**Skin corrosion/irritation**
no data available

**Serious eye damage/eye irritation**
no data available

**Respiratory or skin sensitisation**
no data available

**Germ cell mutagenicity**
no data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
no data available

no data available

**Specific target organ toxicity - single exposure**
no data available

**Specific target organ toxicity - repeated exposure**
no data available

**Aspiration hazard**
no data available

**Additional Information**
RTECS: RB9150000

Cholinesterase inhibitors can cause heavy salivation and secretion in the lungs, lachrymation, blurred vision, involuntary defecation, diarrhea, tremor, ataxia, sweating, hypothermia, lowered heart rate, and/or a fall in blood pressure as a result of their action at cholinergic nerve sites., Headache, Nausea, Vomiting, Dizziness, Drowsiness, Confusion., Weakness, Muscle cramps/spasms., Change in pupil size., Fever, Seizures., Incoordination., Convulsions, Coma.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Carassius auratus (goldfish) - > 0.01 - < 0.1 mg/l - 48.0 h |
| | LC50 - Leuciscus idus (Golden orfe) - > 0.01 - < 0.1 mg/l - 48.0 h |
| | LC50 - other fish - > 0.001 - < 0.01 mg/l - 48.0 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 0.76 mg/l - 48 h |
| | LC50 - Daphnia magna (Water flea) - > 0.1 - < 1 mg/l - 48 h |

### 12.2 Persistence and degradability
no data available

### 12.3 Bioaccumulative potential
no data available

### 12.4 Mobility in soil
no data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2811 Class: 6.1 Packing group: II
Proper shipping name: Toxic solids, organic, n.o.s. (Endosulfan sulfate)
Reportable Quantity (RQ): 1 lbs
Marine pollutant: No
Poison Inhalation Hazard: No

**IMDG**
UN number: 2811 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Endosulfan sulfate)
Marine pollutant: No

**IATA**
UN number: 2811 Class: 6.1 Packing group: II
Proper shipping name: Toxic solid, organic, n.o.s. (Endosulfan sulfate)

## 15. REGULATORY INFORMATION

**SARA 302 Components**
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Endosulfan sulfate | 1031-07-8 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Endosulfan sulfate | 1031-07-8 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Endosulfan sulfate | 1031-07-8 | 1993-04-24 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| H300 | Fatal if swallowed. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**
Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.1 Revision Date: 06/27/2014 Print Date: 04/20/2016

# SAFETY DATA SHEET

Version 5.5
Revision Date 08/09/2016
Print Date 07/31/2019

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

| | | |
|---|---|---|
| Product name | : | Endrin |
| Product Number | : | 49032 |
| Brand | : | Supelco |
| Index-No. | : | 602-051-00-X |
| CAS-No. | : | 72-20-8 |

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

| | | |
|---|---|---|
| Identified uses | : | Laboratory chemicals, Synthesis of substances |

### 1.3 Details of the supplier of the safety data sheet

| | | |
|---|---|---|
| Company | : | Sigma-Aldrich<br>3050 Spruce Street<br>SAINT LOUIS MO 63103<br>USA |
| Telephone | : | +1 800-325-5832 |
| Fax | : | +1 800-325-5052 |

### 1.4 Emergency telephone number

| | | |
|---|---|---|
| Emergency Phone # | : | +1-703-527-3887 (CHEMTREC) |

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 1), H300
Acute toxicity, Dermal (Category 2), H310
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word — Danger

Hazard statement(s)

| | |
|---|---|
| H300 + H310 | Fatal if swallowed or in contact with skin |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P262 | Do not get in eyes, on skin, or on clothing. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse |

| | |
|---|---|
| | mouth. |
| P302 + P350 + P310 | IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/ physician. |
| P361 | Remove/Take off immediately all contaminated clothing. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $C_{12}H_8Cl_6O$ |
| Molecular weight | : | 380.91 g/mol |
| CAS-No. | : | 72-20-8 |
| EC-No. | : | 200-775-7 |
| Index-No. | : | 602-051-00-X |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Endrin** | | |
| | Acute Tox. 1; Acute Tox. 2; Aquatic Acute 1; Aquatic Chronic 1; H300 + H310, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
No data available

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature 2 - 8 °C

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Endrin | 72-20-8 | TWA | 0.100000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Central Nervous System impairment<br>Headache<br>Liver damage<br>Not classifiable as a human carcinogen<br>Danger of cutaneous absorption | | |
| | | TWA | 0.100000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential for dermal absorption | | |
| | | TWA | 0.100000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Skin designation | | |

| | | | | |
|---|---|---|---|---|
| | | PEL | 0.1 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
| | | Skin | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | No data available |

| | | |
|---|---|---|
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | insoluble |
| o) | Partition coefficient: n-octanol/water | log Pow: 5.20 |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | 226.0 °C (438.8 °F) - |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 3.0 mg/kg

Inhalation: No data available

LD50 Dermal - Rabbit - 60.0 mg/kg

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Central nervous system -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Oncorhynchus mykiss (rainbow trout) - < 0.001 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia pulex (Water flea) - 0.02 mg/l - 48 h |
| | Immobilization EC50 - Daphnia magna (Water flea) - 0.0042 mg/l - 48 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
Bioaccumulation: Pimephales promelas (fathead minnow) - 56 d - 0.63 mg/l

Bioconcentration factor (BCF): 13,000

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2811 Class: 6.1 Packing group: I
Proper shipping name: Toxic solids, organic, n.o.s. (Endrin)
Reportable Quantity (RQ): 1 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 2811 Class: 6.1 Packing group: I EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Endrin)
Marine pollutant:yes

**IATA**
UN number: 2811 Class: 6.1 Packing group: I
Proper shipping name: Toxic solid, organic, n.o.s. (Endrin)

## 15. REGULATORY INFORMATION

**SARA 302 Components**
The following components are subject to reporting levels established by SARA Title III, Section 302:

| | CAS-No. | Revision Date |
|---|---|---|
| Endrin | 72-20-8 | 2007-07-01 |

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Endrin | 72-20-8 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Endrin | 72-20-8 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Endrin | 72-20-8 | 2007-07-01 |

**California Prop. 65 Components**
WARNING: This product contains a chemical known to the CAS-No. Revision Date

| | | |
|---|---|---|
| State of California to cause birth defects or other reproductive harm.<br>Endrin | 72-20-8 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| H300 | Fatal if swallowed. |
| H300 + H310 | Fatal if swallowed or in contact with skin |
| H310 | Fatal in contact with skin. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 4 |
| Chronic Health Hazard: | |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.5 Revision Date: 08/09/2016 Print Date: 07/31/2019

MATHESON
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# Safety Data Sheet

**Material Name: ETHYL BENZENE** **SDS ID: MAT08780**

## Section 1 - PRODUCT AND COMPANY IDENTIFICATION

**Material Name**
ETHYL BENZENE
**Synonyms**
MTG MSDS 185; EB; PHENYLETHANE; ETHYLBENZENE; ETHYLBENZOL; ALPHA-METHYLTOLUENE; UN 1175; C8H10
**Chemical Family**
Hydrocarbons, aromatic
**Product Use**
industrial.
**Restrictions on Use**
None known.
**Details of the supplier of the safety data sheet**
MATHESON TRI-GAS, INC.
150 Allen Road, Suite 302
Basking Ridge, NJ 07920
General Information: 1-800-416-2505
Emergency #: 1-800-424-9300 (CHEMTREC)
Outside the US: 703-527-3887 (Call collect)

## Section 2 - HAZARDS IDENTIFICATION

**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**
Flammable Liquids - Category 2
Aspiration Hazard - Category 1
Acute Toxicity - Inhalation - Dust/Mist - Category 4
Acute Toxicity - Inhalation - Vapor - Category 4
Skin Corrosion/Irritation - Category 2
Serious Eye Damage/Eye Irritation - Category 2A
Carcinogenicity - Category 2
Reproductive Toxicity - Category 1B
Specific target organ toxicity - Single exposure - Category 2
Specific target organ toxicity - Single exposure - Category 3
Specific Target Organ Toxicity - Repeated Exposure - Category 2 ( ears , Ears )
Hazardous to the Aquatic Environment - Acute - Category 2
Hazardous to the Aquatic Environment - Chronic - Category 2
**GHS Label Elements**
**Symbol(s)**



**Signal Word**
Danger
**Hazard Statement(s)**

Highly flammable liquid and vapor.
Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer.
May damage fertility or the unborn child.
May cause damage to organs. (central nervous system )
May cause respiratory irritation.
May be fatal if swallowed and enters airways.
Toxic to aquatic life.

**Precautionary Statement(s)**

**Prevention**

Keep away from heat, sparks, open flame, and hot surfaces - No smoking.
Keep container tightly closed.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use Personal Protective equipment as required.
Do not breathe vapor or mist.
Use only outdoors or in a well-ventilated area.
Wear protective gloves and eye/face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.

**Response**

In case of fire, use media appropriate for extinction.
IF exposed or concerned: Get medical advice/attention.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.

**Storage**

Store in a well-ventilated place.
Keep cool.
Keep container tightly closed.
Store locked up.

**Disposal**

Dispose in accordance with all applicable regulations.

**Statement(s) of Unknown Acute Toxicity**

Inhalation 0% of the mixture consists of ingredient(s) of unknown acute toxicity.

**Statement(s) of Unknown Aquatic Toxicity**
0% of the mixture consists of ingredient(s) of unknown acute aquatic toxicity.
0% of the mixture consists of ingredient(s) of unknown chronic aquatic toxicity.

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| CAS | Component Name | Percent |
|---|---|---|
| 100-41-4 | ETHYL BENZENE | 100 |

## Section 4 - FIRST AID MEASURES

**Inhalation**
If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.
**Skin**
Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.
**Eyes**
Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Then get immediate medical attention.
**Ingestion**
aspiration hazard. Do NOT induce vomiting. When vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention immediately. Give artificial respiration if not breathing.
**Most Important Symptoms/Effects**
**Acute**
respiratory tract irritation, skin irritation, eye irritation, central nervous system damage, lung damage (from aspiration)
**Delayed**
cancer, Reproductive Effects
**Note to Physicians**
For inhalation, consider oxygen.

## Section 5 - FIRE FIGHTING MEASURES

**Extinguishing Media**
**Suitable Extinguishing Media**
regular dry chemical, carbon dioxide, water spray, regular foam, Large fires: Use water spray, fog or regular foam.
**Unsuitable Extinguishing Media**
Do not use high-pressure water streams.
**Special Hazards Arising from the Chemical**
Severe fire hazard. Vapor/air mixtures are explosive above flash point. The vapor is heavier than air. Vapors or gases may ignite at distant ignition sources and flash back. Electrostatic discharges may be generated by flow or agitation resulting in ignition or explosion.
**Hazardous Combustion Products**
Oxides of carbon
**Fire Fighting Measures**
Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank,

rail car or tank truck: Evacuation radius: 800 meters (1/2 mile). Do not attempt to extinguish fire unless flow of material can be stopped first. Flood with fine water spray. Do not scatter spilled material with high-pressure water streams. Cool containers with water spray until well after the fire is out. Apply water from a protected location or from a safe distance. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Water may be ineffective.

**Special Protective Equipment and Precautions for Firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

## Section 6 - ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8.

**Methods and Materials for Containment and Cleaning Up**

Avoid heat, flames, sparks and other sources of ignition. Eliminate all ignition sources if safe to do so. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Stop leak if possible without personal risk. Prevent entry into waterways, sewers, basements, or confined areas. Reduce vapors with water spray. Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Dike for later disposal. Remove sources of ignition. Use water spray to reduce vapors or divert vapor cloud drift. Keep unnecessary people away, isolate hazard area and deny entry. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).

**Environmental Precautions**

Avoid release to the environment.

## Section 7 - HANDLING AND STORAGE

**Precautions for Safe Handling**

Keep away from heat, sparks, open flame, and hot surfaces - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use Personal Protective equipment as required. Do not breathe vapor or mist. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection. Wash hands thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid release to the environment.

**Conditions for Safe Storage, Including any Incompatibilities**

Store in a well-ventilated place.
Keep cool.
Keep container tightly closed.
Store locked up.
Store and handle in accordance with all current regulations and standards. Store in a well-ventilated area. Keep cool. Keep container tightly closed. Keep locked up. Grounding and bonding required. Keep separated from incompatible substances. Protect from physical damage. Store outside or in a detached building. Store with flammable liquids. Subject to storage regulations: U.S. OSHA 29 CFR 1910.106.

**Incompatible Materials**

Acids, bases, oxidizing materials, combustible materials

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

**Component Exposure Limits**

| | |
|---|---|
| **ETHYL BENZENE** | **100-41-4** |

| | |
|---|---|
| ACGIH: | 20 ppm TWA |
| NIOSH: | 100 ppm TWA ; 435 mg/m3 TWA |
| | 125 ppm STEL ; 545 mg/m3 STEL |
| | 800 ppm IDLH (10% LEL ) |
| Europe: | 100 ppm TWA ; 442 mg/m3 TWA |
| | Possibility of significant uptake through the skin |
| | 200 ppm STEL ; 884 mg/m3 STEL |
| OSHA (US): | 100 ppm TWA ; 435 mg/m3 TWA |
| Mexico: | 100 ppm TWA VLE-PPT ; 435 mg/m3 TWA VLE-PPT |
| | 125 ppm STEL [PPT-CT ]; 545 mg/m3 STEL [PPT-CT ] |

**ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)**
**ETHYL BENZENE (100-41-4)**
0.15 g/g creatinine Medium: urine Time: end of shift Parameter: Sum of mandelic acid and phenylglyoxylic acid (nonspecific )

**Engineering Controls**
Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

**Individual Protection Measures, such as Personal Protective Equipment**

**Eye/face protection**
Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**Skin Protection**
Wear appropriate chemical resistant clothing.

**Respiratory Protection**
The following respirators and maximum use concentrations are drawn from NIOSH and/or OSHA. 800 ppm. Any air-purifying half-mask respirator equipped with organic vapor cartridge(s). Any air-purifying full-facepiece respirator (gas mask) with a chin-style, front-mounted or back-mounted organic vapor canister. Any powered, air-purifying respirator with organic vapor cartridge(s). Any supplied-air respirator. Any self-contained breathing apparatus with a full facepiece. Emergency or planned entry into unknown concentrations or IDLH conditions -. Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode. Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode. Escape -. Any air-purifying full-facepiece respirator (gas mask) with a chin-style, front-mounted or back-mounted organic vapor canister. Any appropriate escape-type, self-contained breathing apparatus. Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode. Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.

**Glove Recommendations**
Wear appropriate chemical resistant gloves.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---|---|---|---|
| **Appearance** | Clear, colorless liquid | **Physical State** | liquid |
| **Odor** | aromatic odor | **Color** | colorless |
| **Odor Threshold** | 140 ppm | **pH** | Not available |
| **Melting Point** | -95 °C (-139 °F ) | **Boiling Point** | 136 °C (277 °F ) |
| **Boiling Point Range** | Not available | **Freezing point** | Not available |
| **Evaporation Rate** | <1 (Butyl acetate = 1 ) | **Flammability (solid, gas)** | Not available |
| **Autoignition Temperature** | 432 °C (810 °F ) | **Flash Point** | 15 °C Closed Cup (59 °F ) |
| **Lower Explosive Limit** | 0.8 % | **Decomposition temperature** | Not available |
| **Upper Explosive Limit** | 6.7 % | **Vapor Pressure** | 7.1 mmHg @ 20 °C |
| **Vapor Density (air=1)** | 3.66 | **Specific Gravity (water=1)** | 0.867 |
| **Water Solubility** | 0.015 % | **Partition coefficient: n-octanol/water** | 154170.05 |
| **Viscosity** | 0.64 cp | **Kinematic viscosity** | Not available |
| **Solubility (Other)** | Not available | **Bioconcentration Factor (BCF)** | 36.39 |
| **Density** | Not available | **Henry's Law Constant** | 0.00788 atm-m3/mole |
| **KOC** | 520 (Estimated ) | **Physical Form** | liquid |
| **Volatility** | 100 % | **Molecular Formula** | C-H3-C-H2-C6-H5 |
| **Molecular Weight** | 106.17 | **OSHA Flammability Class** | IB |

**Solvent Solubility**
**Soluble**
alcohol, ether, Benzene, sulfur dioxide, carbon tetrachloride
**Insoluble**
ammonia

## Section 10 - STABILITY AND REACTIVITY

**Reactivity**
No reactivity hazard is expected.
**Chemical Stability**
Stable at normal temperatures and pressure.

**Possibility of Hazardous Reactions**
Will not polymerize.
**Conditions to Avoid**
Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat. Keep out of water supplies and sewers.
**Incompatible Materials**
Acids, bases, oxidizing materials, combustible materials
**Hazardous decomposition products**
Oxides of carbon

## Section 11 - TOXICOLOGICAL INFORMATION

**Information on Likely Routes of Exposure**
**Inhalation**
irritation (possibly severe), chest pain, difficulty breathing, emotional disturbances, headache, drowsiness, dizziness, loss of coordination, coma, cancer
**Skin Contact**
irritation
**Eye Contact**
irritation
**Ingestion**
nausea, vomiting, stomach pain, aspiration hazard
**Acute and Chronic Toxicity**
**Component Analysis - LD50/LC50**
The components of this material have been reviewed in various sources and the following selected endpoints are published:
**ETHYL BENZENE (100-41-4)**
Oral LD50 Rat 3500 mg/kg
Dermal LD50 Rabbit 15400 mg/kg
Inhalation LC50 Rat 17.4 mg/L 4 h
**Product Toxicity Data**
**Acute Toxicity Estimate**

| | |
|---|---|
| Dermal | > 2000 mg/kg |
| Inhalation - Vapor | 17.4 mg/L |
| Oral | > 2000 mg/kg |

**Immediate Effects**
respiratory tract irritation, skin irritation, eye irritation, central nervous system damage, lung damage (from aspiration)
**Delayed Effects**
Reproductive Effects, cancer
**Irritation/Corrosivity Data**
respiratory tract irritation, skin irritation, eye irritation
**Respiratory Sensitization**
No data available.
**Dermal Sensitization**
No data available.
**Component Carcinogenicity**

| **ETHYL BENZENE** | **100-41-4** |
|---|---|
| ACGIH: | A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans |
| IARC: | Monograph 77 [2000] (Group 2B (possibly carcinogenic to humans)) |
| DFG: | Category 4 (no significant contribution to human cancer ) |
| OSHA: | Present |

**Germ Cell Mutagenicity**
No data available.
**Tumorigenic Data**
No data available
**Reproductive Toxicity**
Available data characterizes components of this product as reproductive hazards.
**Specific Target Organ Toxicity - Single Exposure**
central nervous system, Respiratory system
**Specific Target Organ Toxicity - Repeated Exposure**
No target organs identified.
**Aspiration hazard**
This material is an aspiration hazard.
**Medical Conditions Aggravated by Exposure**
kidney disorders, liver disorders, respiratory disorders, skin disorders and allergies
**Additional Data**
May cross the placenta.

## Section 12 - ECOLOGICAL INFORMATION

**Ecotoxicity**
Toxic to aquatic life.
**Component Analysis - Aquatic Toxicity**

| **ETHYL BENZENE** | **100-41-4** |
|---|---|
| Fish: | LC50 96 h Oncorhynchus mykiss 11 - 18 mg/L [static ]; LC50 96 h Oncorhynchus mykiss 4.2 mg/L [semi-static ]; LC50 96 h Pimephales promelas 7.55 - 11 mg/L [flow-through ]; LC50 96 h Lepomis macrochirus 32 mg/L [static ]; LC50 96 h Pimephales promelas 9.1 - 15.6 mg/L [static ]; LC50 96 h Poecilia reticulata 9.6 mg/L [static ] |
| Algae: | EC50 72 h Pseudokirchneriella subcapitata 4.6 mg/L IUCLID ; EC50 96 h Pseudokirchneriella subcapitata >438 mg/L IUCLID ; EC50 72 h Pseudokirchneriella subcapitata 2.6 - 11.3 mg/L [static ] EPA ; EC50 96 h Pseudokirchneriella subcapitata 1.7 - 7.6 mg/L [static ] EPA |
| Invertebrate: | EC50 48 h Daphnia magna 1.8 - 2.4 mg/L IUCLID |

**Persistence and Degradability**
Not expected to undergo hydrolysis in the environment.
**Bioaccumulative Potential**
Bioconcentration potential in aquatic organisms is low based on a BCF value of 15.
**Mobility**

Expected to have moderate mobility in soil.

## Section 13 - DISPOSAL CONSIDERATIONS

**Disposal Methods**
Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262.
Hazardous Waste Number(s): D001.
**Component Waste Numbers**
The U.S. EPA has not published waste numbers for this product's components.

## Section 14 - TRANSPORT INFORMATION

**US DOT Information:**
**Shipping Name:** ETHYLBENZENE
**Hazard Class:** 3
**UN/NA #:** UN1175
**Packing Group:** II
**Required Label(s):** 3
Marine pollutant

**IMDG Information:**
**Shipping Name:** ETHYLBENZENE
**Hazard Class:** 3
**UN#:** UN1175
**Packing Group:** II
**Required Label(s):** 3
Marine pollutant
**International Bulk Chemical Code**
This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

| **ETHYL BENZENE** | **100-41-4** |
|---|---|
| IBC Code: | Category Y |

## Section 15 - REGULATORY INFORMATION

**U.S. Federal Regulations**
This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

| **ETHYL BENZENE** | **100-41-4** |
|---|---|
| SARA 313: | 0.1 % de minimis concentration |
| CERCLA: | 1000 lb final RQ ; 454 kg final RQ |

**SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories**
Flammable; Carcinogenicity; Acute toxicity; Reproductive Toxicity; Skin Corrosion/Irritation; Serious Eye Damage/Eye Irritation; Specific Target Organ Toxicity; Aspiration Hazard
**U.S. State Regulations**
The following components appear on one or more of the following state hazardous substances lists:

| Component | CAS | CA | MA | MN | NJ | PA |
|---|---|---|---|---|---|---|
| **ETHYL BENZENE** | **100-41-4** | Yes | Yes | Yes | Yes | Yes |

**The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):**
WARNING! This product contains a chemical known to the state of California to cause cancer

| **ETHYL BENZENE** | **100-41-4** |
|---|---|
| Carc: | carcinogen , 6/11/2004 |

**Canada Regulations**
**Canadian WHMIS Ingredient Disclosure List (IDL)**
Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

| **ETHYL BENZENE** | **100-41-4** |
|---|---|
| | 0.1 % |

**WHMIS Classification**
B2
**Component Analysis - Inventory**
**ETHYL BENZENE (100-41-4)**

| US | CA | EU | AU | PH | JP - ENCS | JP - ISHL | KR KECI - Annex 1 | KR KECI - Annex 2 | KR - REACH CCA | CN | NZ | MX | TW | VN - NCI (Draft) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes | Yes |

## Section 16 - OTHER INFORMATION

**NFPA Ratings**
Health: 2 Fire: 3 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe
**Summary of Changes**
Updated: 05/01/2015
**Key / Legend**
ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC – European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research

on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL) , KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX – Mexico; NDSL – Non-Domestic Substance List (Canada); NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TCCA – Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW – Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN NCI (Draft) - Vietnam National Chemicals Inventory (NCI) (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada) .

**Other Information**

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# SAFETY DATA SHEET

Helium

## Section 1. Identification

**GHS product identifier** : Helium

**Chemical name** : Helium

**Other means of identification** : helium (dot); Helium-4; He; o-Helium; UN 1046

**Product use** : Synthetic/Analytical chemistry.

**Synonym** : helium (dot); Helium-4; He; o-Helium; UN 1046

**SDS #** : 001025

**Supplier's details** : Airgas USA, LLC and its affiliates
259 North Radnor-Chester Road
Suite 100
Radnor, PA 19087-5283
1-610-687-5253

**Emergency telephone number (with hours of operation)** : 1-866-734-3438

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : GASES UNDER PRESSURE - Compressed gas

**GHS label elements**

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : Contains gas under pressure; may explode if heated.
May displace oxygen and cause rapid suffocation.

**Precautionary statements**

**General** : Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction.

**Prevention** : Use and store only outdoors or in a well ventilated place.

**Response** : Not applicable.

**Storage** : Protect from sunlight. Protect from sunlight when ambient temperature exceeds 52°C/125°F. Store in a well-ventilated place.

**Disposal** : Not applicable.

**Hazards not otherwise classified** : In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.



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# Section 3. Composition/information on ingredients

**Substance/mixture** : Substance

**Chemical name** : Helium

**Other means of identification** : helium (dot); Helium-4; He; o-Helium; UN 1046

## CAS number/other identifiers

**CAS number** : 7440-59-7

**Product code** : 001025

| Ingredient name | % | CAS number |
|---|---|---|
| Helium | 100 | 7440-59-7 |

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

# Section 4. First aid measures

## Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : As this product is a gas, refer to the inhalation section.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Contact with rapidly expanding gas may cause burns or frostbite.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Contact with rapidly expanding gas may cause burns or frostbite.

**Frostbite** : Try to warm up the frozen tissues and seek medical attention.

**Ingestion** : As this product is a gas, refer to the inhalation section.

### Over-exposure signs/symptoms

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

## Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.



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## Section 4. First aid measures

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicological information (Section 11)**

## Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.

**Hazardous thermal decomposition products** : No specific data.

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up**

**Small spill** : Immediately contact emergency personnel. Stop leak if without risk.

**Large spill** : Immediately contact emergency personnel. Stop leak if without risk. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.



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# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| Ingredient name | Exposure limits |
|---|---|
| Helium | Oxygen Depletion [Asphyxiant] |

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

**Skin protection**



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## Section 8. Exposure controls/personal protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

**Appearance**

**Physical state** : Gas. [Compressed gas.]

**Color** : Colorless.

**Molecular weight** : 4 g/mole

**Molecular formula** : He

**Boiling/condensation point** : -268.9°C (-452°F)

**Melting/freezing point** : -272.2°C (-458°F)

**Critical temperature** : -267.9°C (-450.2°F)

**Odor** : Odorless.

**Odor threshold** : Not available.

**pH** : Not available.

**Flash point** : [Product does not sustain combustion.]

**Burning time** : Not applicable.

**Burning rate** : Not applicable.

**Evaporation rate** : Not available.

**Flammability (solid, gas)** : Not available.

**Lower and upper explosive (flammable) limits** : Not available.

**Vapor pressure** : Not available.

**Vapor density** : 0.14 (Air = 1) Liquid Density@BP: 7.8 lb/ft3 (125 kg/m3)

**Specific Volume (ft $^3$/lb)** : 96.1538

**Gas Density (lb/ft $^3$)** : 0.0104

**Relative density** : Not applicable.

**Solubility** : Not available.

**Solubility in water** : Not available.

**Partition coefficient: n-octanol/water** : 0.28

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.



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## Section 9. Physical and chemical properties

**SADT** : Not available.

**Viscosity** : Not applicable.

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : No specific data.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Not available.

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.



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# Section 11. Toxicological information

**Information on the likely routes of exposure** : Not available.

## Potential acute health effects

**Eye contact** : Contact with rapidly expanding gas may cause burns or frostbite.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Contact with rapidly expanding gas may cause burns or frostbite.

**Ingestion** : As this product is a gas, refer to the inhalation section.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## Numerical measures of toxicity

### Acute toxicity estimates

Not available.

# Section 12. Ecological information

## Toxicity

Not available.

## Persistence and degradability

Not available.



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# Section 12. Ecological information

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Helium | 0.28 | - | low |

## Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

# Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

# Section 14. Transport information

| | DOT | TDG | Mexico | IMDG | IATA |
|---|---|---|---|---|---|
| **UN number** | UN1046 | UN1046 | UN1046 | UN1046 | UN1046 |
| **UN proper shipping name** | HELIUM, COMPRESSED | HELIUM, COMPRESSED | HELIUM, COMPRESSED | HELIUM, COMPRESSED | HELIUM, COMPRESSED |
| **Transport hazard class(es)** | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   |
| **Packing group** | - | - | - | - | - |
| **Environment** | No. | No. | No. | No. | No. |
| **Additional information** | **Limited quantity** Yes.<br><br>**Packaging instruction**<br>**Passenger aircraft** Quantity limitation: 75 kg<br><br>**Cargo aircraft** Quantity limitation: 150 kg | **Explosive Limit and Limited Quantity Index** 0.125<br><br>**Passenger Carrying Road or Rail Index** 75 | - | - | **Passenger and Cargo Aircraft**Quantity limitation: 75 kg<br>**Cargo Aircraft Only** Quantity limitation: 150 kg |

**"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."**



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## Section 14. Transport information

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

**United States inventory (TSCA 8b)**: This material is listed or exempted.

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : Sudden release of pressure

**Composition/information on ingredients**

| Name | % | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|---|---|---|---|---|---|---|
| Helium | 100 | No. | Yes. | No. | No. | No. |

**State regulations**

**Massachusetts** : This material is listed.

**New York** : This material is not listed.

**New Jersey** : This material is listed.

**Pennsylvania** : This material is listed.

**Canada inventory** : This material is listed or exempted.

**International regulations**



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# Section 15. Regulatory information

**International lists** : **Australia inventory (AICS)**: This material is listed or exempted.
**China inventory (IECSC)**: This material is listed or exempted.
**Japan inventory**: Not determined.
**Korea inventory**: This material is listed or exempted.
**Malaysia Inventory (EHS Register)**: Not determined.
**New Zealand Inventory of Chemicals (NZIoC)**: This material is listed or exempted.
**Philippines inventory (PICCS)**: This material is listed or exempted.
**Taiwan inventory (CSNN)**: Not determined.

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

## Canada

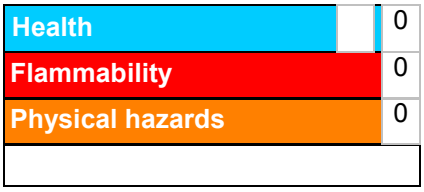
**WHMIS (Canada)** : Class A: Compressed gas.

**CEPA Toxic substances**: This material is not listed.
**Canadian ARET**: This material is not listed.
**Canadian NPRI**: This material is not listed.
**Alberta Designated Substances**: This material is not listed.
**Ontario Designated Substances**: This material is not listed.
**Quebec Designated Substances**: This material is not listed.

# Section 16. Other information

**Canada Label requirements** : Class A: Compressed gas.

## Hazardous Material Information System (U.S.A.)




**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.**

**The customer is responsible for determining the PPE code for this material.**

## National Fire Protection Association (U.S.A.)

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# Section 16. Other information

**Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.**

## History

**Date of printing** : 10/15/2014.

**Date of issue/Date of revision** : 10/15/2014.

**Date of previous issue** : 10/2/2014.

**Version** : 0.02

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United NationsACGIH – American Conference of Governmental Industrial Hygienists
AIHA – American Industrial Hygiene Association
CAS – Chemical Abstract Services
CEPA – Canadian Environmental Protection Act
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act (EPA)
CFR – United States Code of Federal Regulations
CPR – Controlled Products Regulations
DSL – Domestic Substances List
GWP – Global Warming Potential
IARC – International Agency for Research on Cancer
ICAO – International Civil Aviation Organisation
Inh – Inhalation
LC – Lethal concentration
LD – Lethal dosage
NDSL – Non-Domestic Substances List
NIOSH – National Institute for Occupational Safety and Health
TDG – Canadian Transportation of Dangerous Goods Act and Regulations
TLV – Threshold Limit Value
TSCA – Toxic Substances Control Act
WEEL – Workplace Environmental Exposure Level
WHMIS – Canadian Workplace Hazardous Material Information System

**References** : Not available.

**Indicates information that has changed from previously issued version.**

## Notice to reader

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**
**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**



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# SAFETY DATA SHEET

Version 6.7
Revision Date 08/06/2024
Print Date 08/07/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Potassium hydrogen phthalate

Product Number : P1088
Brand : Sigma-Aldrich
CAS-No. : 877-24-7

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

### 2.2 GHS Label elements, including precautionary statements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.



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**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## SECTION 3: Composition/information on ingredients

**3.1 Substances**

| | | |
|---|---|---|
| Synonyms | : | KHP<br>Potassium biphthalate<br>Potassium phthalate monobasic<br>Phthalic acidmonopotassium salt<br>Potassium hydrogen phthalate |
| Formula | : | $C_8H_5KO_4$ |
| Molecular weight | : | 204.22 g/mol |
| CAS-No. | : | 877-24-7 |
| EC-No. | : | 212-889-4 |

No components need to be disclosed according to the applicable regulations.

## SECTION 4: First aid measures

**4.1 Description of first-aid measures**
No data available

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## SECTION 5: Firefighting measures

**5.1 Extinguishing media**
No data available

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides
Potassium oxides
Combustible.

**5.3 Advice for firefighters**
No data available

**5.4 Further information**
No data available



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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
For personal protection see section 8.

### 6.2 Environmental precautions
No data available

### 6.3 Methods and materials for containment and cleaning up
No data available

### 6.4 Reference to other sections
For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
No data available

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Personal protective equipment**

**Skin protection**
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please



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contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

**Control of environmental exposure**
Prevent product from entering drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: Crystalline solid<br>Color: white |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | 4 at 25 °C (77 °F) |
| e) | Melting point/freezing point | Melting point/ range: 295 - 300 °C (563 - 572 °F) - dec. |
| f) | Initial boiling point and boiling range | > 300 °C > 572 °F at 977.5 hPa - OECD Test Guideline 103 |
| g) | Flash point | 197.3 °C (387.1 °F) - Pensky-Martens closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | The product is not flammable. - Regulation (EC) No. 440/2008, Annex, A.10 |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | No data available |
| l) | Vapor density | No data available |
| m) | Density | 1.571 g/cm3 at 20 °C (68 °F) |
| | Relative density | No data available |
| n) | Water solubility | 93 g/l at 30 °C (86 °F) - OECD Test Guideline 105 |
| o) | Partition coefficient: n-octanol/water | log Pow: <= -3.9 at 30 °C (86 °F) - Bioaccumulation is not expected. |
| p) | Autoignition temperature | does not ignite |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |



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s) Explosive properties No data available

t) Oxidizing properties none

**9.2 Other safety information**
No data available

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
No data available

**10.3 Possibility of hazardous reactions**
Violent reactions possible with:
Strong oxidizing agents
Nitric acid

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
No data available

**10.6 Hazardous decomposition products**
In the event of fire: see section 5

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Acute toxicity**
Acute toxicity estimate Oral - 2,500 mg/kg
(Calculation method)
LD50 Oral - Rat - > 3,200 mg/kg
Remarks: (ECHA)
Inhalation: No data available
Dermal: No data available

**Skin corrosion/irritation**
Remarks: slight irritation

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: No eye irritation
Remarks: The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
(ECHA)



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**Respiratory or skin sensitization**
In vitro study
Result: negative
(OECD Test Guideline 442D)

**Germ cell mutagenicity**
Test Type: Ames test
Test system: S. typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

**Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

RTECS: CZ4326000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | static test LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h<br>(OECD Test Guideline 203) |
| Toxicity to algae | static test ErC50 - Desmodesmus subspicatus (green algae) - 329.5 mg/l - 72 h<br>(OECD Test Guideline 201) |



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| | |
|---|---|
| Toxicity to bacteria | Remarks: (ECHA)<br>(potassium hydrogen phthalate) |

**12.2 Persistence and degradability**

| | |
|---|---|
| Biodegradability | Result: 97.34 % - Readily biodegradable.<br>(OECD Test Guideline 301D) |

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Endocrine disrupting properties**

No data available

**12.7 Other adverse effects**

Discharge into the environment must be avoided.

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

No data available

## SECTION 14: Transport information

**DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**Further information**

Not classified as dangerous in the meaning of transport regulations.



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## SECTION 15: Regulatory information

**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations**

**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

**Washington Chemicals of High Concern**

Product does not contain any listed chemicals

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16: Other information

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

Version: 6.7 Revision Date: 08/06/2024 Print Date: 08/07/2024



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# Safety Data Sheet

## 20ppm Hydrogen Sulfide, 60ppm Carbon Monoxide, 58% LEL Pentane Simulant, 15% VOL Oxygen; balance Nitrogen

**Ideal Calibrations, LLC**
2750 Oakwood Blvd.
Melvindale, MI 48122
(734) 956-0539
http://www.idealcalibrations.com/

## Section 1: Product and Company Identification

**Ideal Calibrations, LLC**
2750 Oakwood Blvd.
Melvindale, MI 48122
(734) 956-0539
http://www.idealcalibrations.com/

Product Code: 20ppm Hydrogen Sulfide, 60ppm Carbon Monoxide, 58% LEL Pentane Simulant, 15% VOL Oxygen; balance Nitrogen
Part Number: 0219

**Synonyms:**
**Recommended Use:** Calibration of gas detection devices
**Usage Restrictions:** Do not use if current date is past expiration date on cylinder

## Section 2: Hazards Identification



**Warning**

### Hazard Classification:
Gases Under Pressure

### Hazard Statements:
Contains gas under pressure; may explode if heated
Toxic to aquatic life

### Precautionary Statements

**Storage:**
Protect from sunlight.
Store in well-ventilated place.


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# Section 3: Composition/Information on Ingredients

| | CAS # | Concentration |
|---|---|---|
| **Hydrogen Sulfide** | 7783-06-4 | 0.002 |
| **Carbon Monoxide** | 630-08-0 | 0.006 |
| **Methane** | 74-82-8 | 1.45 |
| **Oxygen** | 7782-44-7 | 15 |
| **Nitrogen** | 7727-37-9 | 83.542 |

| | Chemical Substance | Chemical Family | Trade Names |
|---|---|---|---|
| **Hydrogen Sulfide** | HYDROGEN SULFIDE | Inorganic gases | HYDROGEN SULFIDE (H2S); DIHYDROGEN MONOSULFIDE; DIHYDROGEN SULFIDE; HYDROSULFURIC ACID; SULFUR DIHYDRIDE; SULFURETED HYDROGEN; SULFUR HYDRIDE; STINK DAMP; SEWER GAS; RCRA U135; UN 1053; H2S |
| **Carbon Monoxide** | CARBON MONOXIDE | Inorganic gases | CARBON OXIDE; CARBON OXIDE (CO); UN 1016; CO |
| **Methane** | METHANE, COMPRESSED GAS | Hydrocarbons, Aliphatic, Saturated | FIRE DAMP; MARSH GAS; METHYL HYDRIDE; NATURAL GAS; METHANE; UN 1971; R50; CH4 |
| **Oxygen** | OXYGEN, COMPRESSED GAS | Inorganic gases | OXYGEN; DIOXYGEN; MOLECULAR OXYGEN; OXYGEN MOLECULE; PURE OXYGEN; UN 1072; O2 |
| **Nitrogen** | NITROGEN, COMPRESSED GAS | Inorganic gases | DIATOMIC NITROGEN; DINITROGEN; NITROGEN; NITROGEN-14; NITROGEN GAS; UN 1066; N2 |

# Section 4: First Aid Measures

| | Skin Contact | Eye Contact | Ingestion | Inhalation | Note to Physicians |
|---|---|---|---|---|---|
| **Hydrogen Sulfide** | Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse. | Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention. | If a large amount is swallowed, get medical attention. | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention. | For inhalation, consider oxygen. |
| **Carbon Monoxide** | Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse. | Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention. | If a large amount is swallowed, get medical attention. | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention. | For inhalation, consider oxygen. |
| **Methane** | Wash exposed skin with soap and water. | Flush eyes with plenty of water. | If a large amount is swallowed, get medical attention. | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention. | For inhalation, consider oxygen. |
| **Oxygen** | None expected | None expected | Not likely route of exposure | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention. | None |


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| | Skin Contact | Eye Contact | Ingestion | Inhalation | Note to Physicians |
|---|---|---|---|---|---|
| **Nitrogen** | Wash exposed skin with soap and water. | Flush eyes with plenty of water. | If a large amount is swallowed, get medical attention. | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention. | For inhalation, consider oxygen. |

## Section 5: Fire Fighting Measures

| | Suitable Extinguishing Media | Products of Combustion | Protection of Firefighters |
|---|---|---|---|
| **Hydrogen Sulfide** | Let burn unless leak can be stopped immediately. Large fires: Use regular foam or flood with fine water spray. | Sulfur oxides | ▪ Any self-contained breathing apparatus with a full facepiece.<br>▪ Protective material types: butyl rubber, polyvinyl chloride (PVC), neoprene |
| **Carbon Monoxide** | Carbon dioxide, regular dry chemical Large fires: Use regular foam or flood with fine water spray. | Carbon dioxide | ▪ Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.<br>▪ Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. |
| **Methane** | Carbon dioxide, regular dry chemical Large fires: Use regular foam or flood with fine water spray. | Carbon monoxide, carbon dioxide, water | ▪ Respiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece.<br>▪ Respiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece. |
| **Oxygen** | Non-flammable. Use extinguishing agent appropriate for the material which is burning. Use water in large quantities for fires involving oxygen. | Oxides of burning material | ▪ Respiratory protection may be needed for frequent or heavy exposure.<br>▪ None |
| **Nitrogen** | Non-flammable. Use suitable extinguishing media for surrounding fire. Cylinders may rupture or explode if exposed to heat. | Non-flammable | ▪ Respiratory protection may be needed for frequent or heavy exposure. |

## Section 6: Accidental Release Measures

| | Personal Precautions | Environmental Precautions | Methods for Containment |
|---|---|---|---|
| **Hydrogen Sulfide** | Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas. Ventilate closed spaces before entering. Evacuation radius: 150 feet. For tank, rail car or tank truck: 800 meters (1/2 mile). Do not touch spilled material. | Avoid heat, flames, sparks and other sources of ignition. | Stop leak if possible without personal risk. Remove sources of ignition. Reduce vapors with water spray. Do not get water directly on material. |
| **Carbon Monoxide** | Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering. | Avoid heat, flames, sparks and other sources of ignition. Keep out of water supplies and sewers. | Stop leak if possible without personal risk. Reduce vapors with water spray. Remove sources of ignition. |
| **Methane** | Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering. | Avoid heat, flames, sparks and other sources of ignition. | Stop leak if possible without personal risk. Reduce vapors with water spray. Remove sources of ignition. |
| **Oxygen** | Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering. | Avoid contact with combustible materials. | Stop leak if possible without personal risk. |
| **Nitrogen** | Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas. | No significant effects from contamination expected. | Stop leak if possible without personal risk. |

| | Methods for Cleanup | Other Information |
|---|---|---|


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| | Methods for Cleanup | Other Information |
|---|---|---|
| **Hydrogen Sulfide** | Collect runoff for disposal as potential hazardous waste. Dike for later disposal. Absorb with sand or other non-combustible material. Add an alkaline material (lime, crushed limestone, sodium bicarbonate, or soda ash). | Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA). |
| **Carbon Monoxide** | Stop leak, evacuate area. Wear protective equipment. | Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). |
| **Methane** | Not available | Not available |
| **Oxygen** | Stop leak and ventilate | None |
| **Nitrogen** | N/A | N/A |

# Section 7: Handling and Storage

| | Handling | Storage |
|---|---|---|
| **Hydrogen Sulfide** | Store and handle in accordance with all current regulations and standards. Protect from physical damage. Store outside or in a detached building. Store in a cool, dry place. Store in a well-ventilated area. Avoid contact with light. Grounding and bonding required. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. Notify State Emergency Response Commission for storage or use at amounts greater than or equal to the TPQ (U.S. EPA SARA Section 302). SARA Section 303 requires facilities storing a material with a TPQ to participate in local emergency response planning (U.S. EPA 40 CFR 355.30). Keep separated from incompatible substances. | Subject to handling regulations: U.S. OSHA 29 CFR 1910.119. |
| **Carbon Monoxide** | Keep separated from incompatible substances. | Store and handle in accordance with all current regulations and standards. Grounding and bonding required. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. |
| **Methane** | Store and handle in accordance with all current regulations and standards. Grounding and bonding required. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. | Keep separated from incompatible substances. |
| **Oxygen** | Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. | Keep separated from incompatible substances. |
| **Nitrogen** | Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. | Keep separated from incompatible substances. |

# Section 8: Exposure Controls/Personal Protection

| | Exposure Guidelines |
|---|---|
| **Hydrogen Sulfide** | HYDROGEN SULFIDE: 20 ppm OSHA ceiling 50 ppm OSHA peak 10 minute(s) (once if no other measurable exposure occurs) 10 ppm (14 mg/m3) OSHA TWA (vacated by 58 FR 35338, June 30, 1993) 15 ppm (21 mg/m3) OSHA STEL (vacated by 58 FR 35338, June 30, 1993) 10 ppm ACGIH TWA 15 ppm ACGIH STEL 10 ppm (15 mg/m3) NIOSH recommended ceiling 10 minute(s) TLV-TWA: 1ppm Upper respiratory irritation (ACGIH) |
| **Carbon Monoxide** | CARBON MONOXIDE: 50 ppm (55 mg/m3) OSHA TWA 35 ppm (40 mg/m3) OSHA TWA (vacated by 58 FR 35338, June 30, 1993) 200 ppm (229 mg/m3) OSHA ceiling (vacated by 58 FR 35338, June 30, 1993) 25 ppm ACGIH TWA 35 ppm (40 mg/m3) NIOSH recommended TWA 10 hour(s) 200 ppm (229 mg/m3) NIOSH recommended ceiling |
| **Methane** | METHANE, COMPRESSED GAS: ALIPHATIC HYDROCARBON GASES ALKANE (C1-C4): 1000 ppm ACGIH TWA METHANE: No occupational exposure limits established. ALIPHATIC HYDROCARBON GASES ALKANE (C1-C4): 1000 ppm ACGIH TWA |
| **Oxygen** | OXYGEN, COMPRESSED GAS: No occupational exposure limits established. |
| **Nitrogen** | NITROGEN, COMPRESSED GAS: NITROGEN: ACGIH (simple asphyxiant) |

### Engineering Controls

Handle only in fully enclosed systems.

| | Eye Protection | Skin Protection | Respiratory Protection |
|---|---|---|---|
| **Hydrogen Sulfide** | Wear splash resistant safety goggles with a face shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. | Wear appropriate chemical resistant clothing. | Any self-contained breathing apparatus with a full facepiece. |
| **Carbon Monoxide** | Eye protection not required, but recommended. | Protective clothing is not required. | Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. |


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| | Eye Protection | Skin Protection | Respiratory Protection |
|---|---|---|---|
| **Methane** | Eye protection not required, but recommended. | Protective clothing is not required. | Respiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece. |
| **Oxygen** | Eye protection not required, but recommended. | Protective clothing is not required. | Respiratory protection may be needed for frequent or heavy exposure. |
| **Nitrogen** | Eye protection not required, but recommended. | Protective clothing is not required. | Respiratory protection may be needed for frequent or heavy exposure. |

### General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

## Section 9: Physical and Chemical Properties

| | Physical State | Appearance | Color | Change in Appearance | Physical Form | Odor | Taste |
|---|---|---|---|---|---|---|---|
| **Hydrogen Sulfide** | Gas | Colorless | Colorless | N/A | Gas | Rotten egg odor | N/A |
| **Carbon Monoxide** | Gas | Colorless | Colorless | N/A | Gas | Odorless | Tasteless |
| **Methane** | Gas | Colorless | Colorless | N/A | Gas | Odorless | Tasteless |
| **Oxygen** | Gas | Clear | Colorless | N/A | Gas | Odorless | Tasteless |
| **Nitrogen** | Gas | Clear | Colorless | N/A | Gas | Odorless | Tasteless |

| | Flash Point | Flammability | Partition Coefficient | Autoignition Temperature | Upper Explosive Limits | Lower Explosive Limits |
|---|---|---|---|---|---|---|
| **Hydrogen Sulfide** | Flammable | Not available | Not available | 500 F (260 C) | 45.5% | 3.9% |
| **Carbon Monoxide** | Flammable | Not available | 1479.11 (log = 3.17) (estimated from water solubility) | 1128-1202 F (609-650 C) | 0.74 | 12.0-12.5% |
| **Methane** | -369 F (-223 C) | Not available | 724.44 (log = 2.87) (estimated from water solubility) | 999 F (537 C) | 15% | 5% |
| **Oxygen** | Not flammable | Not available | Not available | Nonflammable | Nonflammable | Nonflammable |
| **Nitrogen** | Not flammable | Not available | Not available | Nonflammable | Nonflammable | Nonflammable |

| | Boiling Point | Freezing Point | Vapor Pressure | Vapor Density | Specific Gravity | Water Solubility | pH | Odor Threshold | Evaporation Rate | Viscosity |
|---|---|---|---|---|---|---|---|---|---|---|
| **Hydrogen Sulfide** | -78 to -77 F (-61 to -60.3 C) | -123 F (-86 C) | 15200 mmHg @ 25 C | 1.2 (Air=1) | 1.192 | 2.58-2.9% @ 20 C | 4.5-<7 (saturated solution) | 0.13 ppm | Not applicable | 0.0128 cP @ 25 C |
| **Carbon Monoxide** | -312.7 F (-191.5 C) | -326 F (-199 C) | 760 mmHg @ -191 C gas; cannot be liquefied at room temperature | 0.968 (Air=1) | Not applicable | 2.3% @ 20 C | Not applicable | Not available | Not applicable | 0.01657 cP @ 0 C |
| **Methane** | -260 F (-162 C) | -297 F (-183 C) | 760 mmHg @ -161 C | 0.555 (Air=1) | Not applicable | 3.5% @ 17 C | Not applicable | Not available | Not applicable | 0.01118 cP @ 27 C |
| **Oxygen** | -297 F (-183 C) | -360 F (-218 C) | 760 mmHg @ -183 C | 1.1 (Air=1) | Not applicable | 3.2% @ 25 C | Not applicable | Not available | Not applicable | 0.02075 cP @ 25 C |
| **Nitrogen** | -321 F (-196 C) | -346 F (-210 C) | 760 mmHg @ -196 C | 0.967 (Air=1) | Not applicable | 1.6% @ 20 C | Not applicable | Not available | Not applicable | 0.01787 cP @ 27 C |

| | Molecular Weight | Molecular Formula | Density | Weight per Gallon | Volatility by Volume | Volatility | Solvent Solubility |
|---|---|---|---|---|---|---|---|


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| | Molecular Weight | Molecular Formula | Density | Weight per Gallon | Volatility by Volume | Volatility | Solvent Solubility |
|---|---|---|---|---|---|---|---|
| **Hydrogen Sulfide** | 34.08 | H2-S | 1.539 g/L @ 0 C | Not available | Not available | Not applicable | Soluble: Carbon disulfide, alcohol, ether, glycerol, gasolines, kerosene, crude oil, alkali solutions |
| **Carbon Monoxide** | 28.01 | C-O | 1.250 g/L @ 0 C | Not available | 100% | Not applicable | Soluble: Alcohol, benzene, acetic acid, ethyl acetate, chloroform, cuprous chloride solutions |
| **Methane** | 16.04 | C-H4 | 0.717 g/L @ 0 C | Not available | Not applicable | Not applicable | Soluble: Alcohol, ether, benzene, organic solvents |
| **Oxygen** | 31.9988 | O2 | 1.309 g/L @ 25 C | Not available | Not applicable | Not applicable | Soluble: Alcohol |
| **Nitrogen** | 28.0134 | N2 | 1.2506 g/L | Not available | 100% | 1 | Soluble: Liquid ammonia |

# Section 10: Stability and Reactivity

| | Stability | Conditions to Avoid | Incompatible Materials |
|---|---|---|---|
| **Hydrogen Sulfide** | Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | Combustible materials, metals, oxidizing materials, halogens, metal oxides, metal salts, bases, rust, oxidants, oxygen, copper powder, acetaldehyde, silver fulminate |
| **Carbon Monoxide** | Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | Oxidizing materials, halogens, metal oxides, metals, combustible materials, lithium |
| **Methane** | Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | Halogens, oxidizing materials, combustible materials |
| **Oxygen** | Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | Combustible materials, halo carbons, metals, bases, reducing agents, amines, metal salts, oxidizing materials, alkaline earth and alkali metals |
| **Nitrogen** | Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | Metals, oxidizing materials |

| | Hazardous Decomposition Products | Possibility of Hazardous Reactions |
|---|---|---|
| **Hydrogen Sulfide** | Oxides of sulfur | Will not polymerize. |
| **Carbon Monoxide** | Oxides of carbon | Will not polymerize. |
| **Methane** | Oxides of carbon | Will not polymerize. |
| **Oxygen** | Miscellaneous decomposition products | Will not polymerize. |
| **Nitrogen** | Oxides of nitrogen | Will not polymerize. |

# Section 11: Toxicology Information

### Acute Effects

| | Oral LD50 | Dermal LD50 | Inhalation |
|---|---|---|---|
| **Hydrogen Sulfide** | 444 ppm inhalation-rat LC50 | Irritation 0.000125 ppm/5 hour(s) eyes-human | Irritation, lack of sense of smell, sensitivity to light, nausea, vomiting, difficulty breathing, headache, drowsiness, dizziness, disorientation, tremors, visual disturbances, suffocation, lung congestion, internal bleeding, heart damage, nerve damage, brain damage, coma, death |
| **Carbon Monoxide** | LC50 Inhalation Gas. Rat 1807 ppm 4 hours | Not available | Changes in body temperature, changes in blood pressure, nausea, vomiting, chest pain, difficulty breathing, irregular heartbeat, headache, drowsiness, dizziness, disorientation, hallucinations, pain in extremities, tremors, loss of coordination, hearing loss, visual disturbances, eye damage, suffocation, blood disorders, convulsions, coma |
| **Methane** | Not available | Not available | Nausea, vomiting, difficulty breathing, irregular heartbeat, headache, drowsiness, fatigue, dizziness, disorientation, mood swings, tingling sensation, loss of coordination, suffocation, convulsions, unconsciousness, coma |
| **Oxygen** | Not established | Not established | Irritation, changes in body temperature, nausea, difficulty breathing, irregular heartbeat, dizziness, disorientation, hallucinations, mood swings, pain in extremities, tremors, lung congestion, convulsions |
| **Nitrogen** | Not available | Not available | Nausea, vomiting, difficulty breathing, headache, drowsiness, dizziness, tingling sensation, loss of coordination, convulsions, coma |


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| | Eye Irritation | Skin Irritation | Sensitization |
|---|---|---|---|
| **Hydrogen Sulfide** | Irritation, sensitivity to light, visual disturbances | Irritation liquid: frostbite | Acute toxicity, Category 2, inhalation; H330: Fatal if inhaled. Specific Target Organ Toxicity (single exposure), Category 3; H335: May cause respiratory irritation. Hazardous to the aquatic environment, Acute Category 1; H400: Very toxic to aquatic life |
| **Carbon Monoxide** | No information on significant adverse effects | No information on significant adverse effects | Acute toxicity, Category 3, inhalation; H331: Toxic if inhaled. Reproductive toxicity, Category 1A; H360D: May damage the unborn child. Specific Target Organ Toxicity (repeated exposure), Category 1; H372: Causes damage to organs through prolonged or repeated exposure. |
| **Methane** | No information on significant adverse effects | No information on significant adverse effects | Difficulty breathing |
| **Oxygen** | No information on significant adverse effects | No information on significant adverse effects | No significant target effects reported. |
| **Nitrogen** | Contact with rapidly expanding gas may cause burns or frostbite | No information on significant adverse effects | Difficulty breathing |

### Chronic Effects

| | Carcinogenicity | Mutagenicity | Reproductive Effects | Developmental Effects |
|---|---|---|---|---|
| **Hydrogen Sulfide** | Not available | Not available | Available. | No data |
| **Carbon Monoxide** | Not available | Available. | Available. | No data |
| **Methane** | Not available | Not available | Not available | No data |
| **Oxygen** | Not known. | Available. | Available. | No data |
| **Nitrogen** | Not hazardous | Not available | Not available | No data |

## Section 12: Ecological Information

### Fate and Transport

| | Eco toxicity | Persistence / Degradability | Bioaccumulation / Accumulation | Mobility in Environment |
|---|---|---|---|---|
| **Hydrogen Sulfide** | Fish toxicity: Acute LC50 7 ug/L Fresh water Fish - Fathead minnow - Pimephales promelas - FRY 96 hours; 14.9 ug/L 96 hour(s) LC50 (Mortality) Fathead minnow (Pimeph<br>Invertibrate toxicity: 9730 ug/L 1.5 hour(s) (Mortality) Mediterranean mussel (Mytilus galloprovincialis)<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Highly toxic to aquatic life. | Not available | Not available |
| **Carbon Monoxide** | Fish toxicity: 75000 ug/L 1 day(s) LC100 (Mortality) Orangespotted sunfish (Lepomis humilis)<br>Invertibrate toxicity: Not available<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Relatively non-persistent in the environment. Highly volatile from water. | Not available | Not expected to leach through the soil or the sediment. |
| **Methane** | Fish toxicity: Not available<br>Invertibrate toxicity: Not available<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Relatively non-persistent in the environment. Moderately volatile from water. | Accumulates very little in the bodies of living organisms. | Not expected to leach through the soil or the sediment. |
| **Oxygen** | Fish toxicity: Not available<br>Invertibrate toxicity: Not available<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Not available | Low bioaccumulation | Not available |
| **Nitrogen** | Fish toxicity: Not available<br>Invertibrate toxicity: Not available<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Not available | Not available | Not available |


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# Section 13: Disposal Considerations

| | |
|---|---|
| **Hydrogen Sulfide** | Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): U135. |
| **Carbon Monoxide** | Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. |
| **Methane** | Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. |
| **Oxygen** | Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. |
| **Nitrogen** | Dispose in accordance with all applicable regulations. |

# Section 14: Transportation Information

## U.S. DOT 49 CFR 172.101

### DOT Information For This Mixture

| | |
|---|---|
| **Shipping Name** | Compressed gas, n.o.s. (Nitrogen, Oxygen) |
| **UN Number** | UN1956 |
| **Hazard Class** | 2.2 |
| **Hazard Information** | Non-Flammable Gas |

### Individual Component Information

| | Proper Shipping Name | ID Number | Hazard Class or Division | Packing Group | Labeling Requirements | Passenger Aircraft or Railcar Quantity Limitations | Cargo Aircraft Only Quantity Limitations | Additional Shipping Description |
|---|---|---|---|---|---|---|---|---|
| **Hydrogen Sulfide** | Hydrogen sulfide | UN1053 | 2.3 | Not applicable | 2.3; 2.1 | Forbidden | Forbidden | Toxic-Inhalation Hazard Zone B |
| **Carbon Monoxide** | Carbon monoxide, compressed | UN1016 | 2.3 | Not applicable | 2.3; 2.1 | Forbidden | 25 kg | Toxic-Inhalation Hazard Zone D |
| **Methane** | Methane, compressed | UN1971 | 2.1 | Not applicable | 2.1 | Forbidden | 150 kg | N/A |
| **Oxygen** | Oxygen, compressed | UN1072 | 2.2 | Not available | 2.2; 5.1 | 75 kg or L | 150 kg | N/A |
| **Nitrogen** | Nitrogen, compressed | UN1066 | 2.2 | Not applicable | 2.2 | 75 kg or L | 150 kg | N/A |

## Canadian Transportation of Dangerous Goods

| | Shipping Name | UN Number | Class | Packing Group / Risk Group |
|---|---|---|---|---|
| **Hydrogen Sulfide** | HYDROGEN SULFIDE; or HYDROGEN SULPHIDE | UN1053 | 2.3; 2.1 | Not applicable |
| **Carbon Monoxide** | Carbon monoxide, compressed | UN1016 | 2.3; 2.1 | Not applicable |
| **Methane** | Methane, compressed | UN1971 | 2.1 | Not applicable |
| **Oxygen** | Oxygen, compressed | UN1072 | 2.2; 5.1 | Not applicable |
| **Nitrogen** | Nitrogen, compressed | UN1066 | 2.2 | Not applicable |

# Section 15: Regulatory Information

## U.S. Regulations

| | CERCLA Sections | SARA 355.30 | SARA 355.40 |
|---|---|---|---|
| **Hydrogen Sulfide** | 100 LBS RQ | 500 LBS TPQ | 100 LBS RQ |
| **Carbon Monoxide** | Not regulated. | Not regulated. | Not regulated. |
| **Methane** | Not regulated. | Not regulated. | Not regulated. |
| **Oxygen** | Not regulated. | Not regulated. | Not regulated. |


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| | | | |
|---|---|---|---|
| **Nitrogen** | Not regulated. | Not regulated. | Not regulated. |

### SARA 370.21

| | Acute | Chronic | Fire | Reactive | Sudden Release |
|---|---|---|---|---|---|
| **Hydrogen Sulfide** | Yes | No | Yes | No | Yes |
| **Carbon Monoxide** | Yes | No | Yes | No | Yes |
| **Methane** | Yes | No | Yes | No | Yes |
| **Oxygen** | No | No | Yes | No | Yes |
| **Nitrogen** | Yes | No | No | No | Yes |

### SARA 372.65

| | |
|---|---|
| **Hydrogen Sulfide** | HYDROGEN SULFIDE: Administrative stay issued Aug. 22, 1994 |
| **Carbon Monoxide** | Not regulated. |
| **Methane** | Not regulated. |
| **Oxygen** | Not regulated. |
| **Nitrogen** | Not regulated. |

### OSHA Process Safety

| | |
|---|---|
| **Hydrogen Sulfide** | 1500 LBS TQ |
| **Carbon Monoxide** | Not regulated. |
| **Methane** | Not regulated. |
| **Oxygen** | Not regulated. |
| **Nitrogen** | Not regulated. |

### State Regulations

| | CA Proposition 65 |
|---|---|
| **Hydrogen Sulfide** | Not regulated. |
| **Carbon Monoxide** | WARNING: This product can expose you to chemicals including Carbon Monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. |
| **Methane** | Not regulated. |
| **Oxygen** | Not regulated. |
| **Nitrogen** | Not regulated. |

### Canadian Regulations

| | WHMIS Classification |
|---|---|
| **Hydrogen Sulfide** | A, B1, D1A, D2B. |
| **Carbon Monoxide** | A, B1, D1A, D2A. |
| **Methane** | A, B1 |
| **Oxygen** | A,C |
| **Nitrogen** | A |

### National Inventory Status

| | US Inventory (TSCA) | TSCA 12b Export Notification | Canada Inventory (DSL/NDSL) |
|---|---|---|---|
| **Hydrogen Sulfide** | Listed on inventory. | Not listed. | Listed on inventory. |
| **Carbon Monoxide** | Listed on inventory. | Not listed. | Listed on inventory. |
| **Methane** | Listed on inventory. | Not listed. | Listed on inventory. |
| **Oxygen** | Listed on inventory. | Not listed. | Not determined. |
| **Nitrogen** | Listed on inventory. | Not listed. | Listed on inventory. |

## Section 16: Other Information

| | NFPA Rating |
|---|---|
| **Hydrogen Sulfide** | HEALTH=4 FIRE=4 REACTIVITY=0 |
| **Carbon Monoxide** | HEALTH=2 FIRE=4 REACTIVITY=0 |
| **Methane** | HEALTH=0 FIRE=4 REACTIVITY=0 |
| **Oxygen** | HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=OX |
| **Nitrogen** | HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=SA |

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard


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# Safety Data Sheet

## 20ppm Hydrogen Sulfide, 60ppm Carbon Monoxide, 58% LEL Pentane Simulant, 15.0% VOL Oxygen, 2.5% VOL Carbon Dioxide; balance Nitrogen

**Ideal Calibrations, LLC**
2750 Oakwood Blvd.
Melvindale, MI 48122
(734) 956-0539
http://www.idealcalibrations.com/

## Section 1: Product and Company Identification

**Ideal Calibrations, LLC**
2750 Oakwood Blvd.
Melvindale, MI 48122
(734) 956-0539
http://www.idealcalibrations.com/

Product Code: 20ppm Hydrogen Sulfide, 60ppm Carbon Monoxide, 58% LEL Pentane Simulant, 15.0% VOL Oxygen, 2.5% VOL Carbon Dioxide; balance Nitrogen
Part Number: 0522

**Synonyms:**
**Recommended Use:** Calibration of gas detection devices
**Usage Restrictions:** Do not use if current date is past expiration date on cylinder

## Section 2: Hazards Identification



**Warning**

### Hazard Classification:
Gases Under Pressure

### Hazard Statements:
Contains gas under pressure; may explode if heated
Toxic to aquatic life

### Precautionary Statements

**Storage:**
Protect from sunlight.
Store in well-ventilated place.


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## Section 3: Composition/Information on Ingredients

| | CAS # | Concentration |
|---|---|---|
| **Hydrogen Sulfide** | 7783-06-4 | 0.002 |
| **Carbon Monoxide** | 630-08-0 | 0.006 |
| **Methane** | 74-82-8 | 1.45 |
| **Oxygen** | 7782-44-7 | 15 |
| **Carbon Dioxide** | 124-38-9 | 2.5 |
| **Nitrogen** | 7727-37-9 | 81.042 |

| | Chemical Substance | Chemical Family | Trade Names |
|---|---|---|---|
| **Hydrogen Sulfide** | HYDROGEN SULFIDE | Inorganic gases | HYDROGEN SULFIDE (H2S); DIHYDROGEN MONOSULFIDE; DIHYDROGEN SULFIDE; HYDROSULFURIC ACID; SULFUR DIHYDRIDE; SULFURETED HYDROGEN; SULFUR HYDRIDE; STINK DAMP; SEWER GAS; RCRA U135; UN 1053; H2S |
| **Carbon Monoxide** | CARBON MONOXIDE | Inorganic gases | CARBON OXIDE; CARBON OXIDE (CO); UN 1016; CO |
| **Methane** | METHANE, COMPRESSED GAS | Hydrocarbons, Aliphatic, Saturated | FIRE DAMP; MARSH GAS; METHYL HYDRIDE; NATURAL GAS; METHANE; UN 1971; R50; CH4 |
| **Oxygen** | OXYGEN, COMPRESSED GAS | Inorganic gases | OXYGEN; DIOXYGEN; MOLECULAR OXYGEN; OXYGEN MOLECULE; PURE OXYGEN; UN 1072; O2 |
| **Carbon Dioxide** | CARBON DIOXIDE, GAS | Inorganic gases | CARBONIC ACID GAS; CARBONIC ANHYDRIDE; CARBON DIOXIDE; CARBON OXIDE; UN 1013; CO2 |
| **Nitrogen** | NITROGEN, COMPRESSED GAS | Inorganic gases | DIATOMIC NITROGEN; DINITROGEN; NITROGEN; NITROGEN-14; NITROGEN GAS; UN 1066; N2 |

## Section 4: First Aid Measures

| | Skin Contact | Eye Contact | Ingestion | Inhalation | Note to Physicians |
|---|---|---|---|---|---|
| **Hydrogen Sulfide** | Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse. | Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention. | If a large amount is swallowed, get medical attention. | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention. | For inhalation, consider oxygen. |
| **Carbon Monoxide** | Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse. | Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention. | If a large amount is swallowed, get medical attention. | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention. | For inhalation, consider oxygen. |
| **Methane** | Wash exposed skin with soap and water. | Flush eyes with plenty of water. | If a large amount is swallowed, get medical attention. | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention. | For inhalation, consider oxygen. |


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| | Skin Contact | Eye Contact | Ingestion | Inhalation | Note to Physicians |
|---|---|---|---|---|---|
| **Oxygen** | None expected | None expected | Not likely route of exposure | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention. | None |
| **Carbon Dioxide** | If frostbite or freezing occur, immediately flush with plenty of lukewarm water (105-115 F; 41-46 C). DO NOT USE HOT WATER. If warm water is not available, gently wrap affected parts in blankets. Get immediate medical attention. | Contact with liquid: Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention. | Do not induce vomiting. | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention. | For inhalation, consider oxygen. |
| **Nitrogen** | Wash exposed skin with soap and water. | Flush eyes with plenty of water. | If a large amount is swallowed, get medical attention. | If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention. | For inhalation, consider oxygen. |

## Section 5: Fire Fighting Measures

| | Suitable Extinguishing Media | Products of Combustion | Protection of Firefighters |
|---|---|---|---|
| **Hydrogen Sulfide** | Let burn unless leak can be stopped immediately. Large fires: Use regular foam or flood with fine water spray. | Sulfur oxides | ▪ Any self-contained breathing apparatus with a full facepiece.<br>▪ Protective material types: butyl rubber, polyvinyl chloride (PVC), neoprene |
| **Carbon Monoxide** | Carbon dioxide, regular dry chemical Large fires: Use regular foam or flood with fine water spray. | Carbon dioxide | ▪ Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.<br>▪ Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. |
| **Methane** | Carbon dioxide, regular dry chemical Large fires: Use regular foam or flood with fine water spray. | Carbon monoxide, carbon dioxide, water | ▪ Respiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece.<br>▪ Respiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece. |
| **Oxygen** | Non-flammable. Use extinguishing agent appropriate for the material which is burning. Use water in large quantities for fires involving oxygen. | Oxides of burning material | ▪ Respiratory protection may be needed for frequent or heavy exposure.<br>▪ None |
| **Carbon Dioxide** | Non-flammable | Non-flammable | ▪ Any appropriate escape-type, self-contained breathing apparatus.<br>▪ Non-flammable |
| **Nitrogen** | Non-flammable. Use suitable extinguishing media for surrounding fire. Cylinders may rupture or explode if exposed to heat. | Non-flammable | ▪ Respiratory protection may be needed for frequent or heavy exposure. |

## Section 6: Accidental Release Measures

| | Personal Precautions | Environmental Precautions | Methods for Containment |
|---|---|---|---|


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| | Personal Precautions | Environmental Precautions | Methods for Containment |
|---|---|---|---|
| **Hydrogen Sulfide** | Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas. Ventilate closed spaces before entering. Evacuation radius: 150 feet. For tank, rail car or tank truck: 800 meters (1/2 mile). Do not touch spilled material. | Avoid heat, flames, sparks and other sources of ignition. | Stop leak if possible without personal risk. Remove sources of ignition. Reduce vapors with water spray. Do not get water directly on material. |
| **Carbon Monoxide** | Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering. | Avoid heat, flames, sparks and other sources of ignition. Keep out of water supplies and sewers. | Stop leak if possible without personal risk. Reduce vapors with water spray. Remove sources of ignition. |
| **Methane** | Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering. | Avoid heat, flames, sparks and other sources of ignition. | Stop leak if possible without personal risk. Reduce vapors with water spray. Remove sources of ignition. |
| **Oxygen** | Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering. | Avoid contact with combustible materials. | Stop leak if possible without personal risk. |
| **Carbon Dioxide** | Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering. Do not touch spilled material. | Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers. | Stop leak if possible without personal risk. |
| **Nitrogen** | Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas. | No significant effects from contamination expected. | Stop leak if possible without personal risk. |

| | Methods for Cleanup | Other Information |
|---|---|---|
| **Hydrogen Sulfide** | Collect runoff for disposal as potential hazardous waste. Dike for later disposal. Absorb with sand or other non-combustible material. Add an alkaline material (lime, crushed limestone, sodium bicarbonate, or soda ash). | Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA). |
| **Carbon Monoxide** | Stop leak, evacuate area. Wear protective equipment. | Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). |
| **Methane** | Not available | Not available |
| **Oxygen** | Stop leak and ventilate | None |
| **Carbon Dioxide** | Stop leak, evacuate, remove source of ignition. | None |
| **Nitrogen** | N/A | N/A |

## Section 7: Handling and Storage

| | Handling | Storage |
|---|---|---|
| **Hydrogen Sulfide** | Store and handle in accordance with all current regulations and standards. Protect from physical damage. Store outside or in a detached building. Store in a cool, dry place. Store in a well-ventilated area. Avoid contact with light. Grounding and bonding required. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. Notify State Emergency Response Commission for storage or use at amounts greater than or equal to the TPQ (U.S. EPA SARA Section 302). SARA Section 303 requires facilities storing a material with a TPQ to participate in local emergency response planning (U.S. EPA 40 CFR 355.30). Keep separated from incompatible substances. | Subject to handling regulations: U.S. OSHA 29 CFR 1910.119. |
| **Carbon Monoxide** | Keep separated from incompatible substances. | Store and handle in accordance with all current regulations and standards. Grounding and bonding required. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. |
| **Methane** | Store and handle in accordance with all current regulations and standards. Grounding and bonding required. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. | Keep separated from incompatible substances. |
| **Oxygen** | Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. | Keep separated from incompatible substances. |
| **Carbon Dioxide** | Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. Keep separated from incompatible substances. | Store and handle in accordance with all current regulations and standards |
| **Nitrogen** | Store and handle in accordance with all current regulations and standards. Subject to storage regulations: U.S. OSHA 29 CFR 1910.101. | Keep separated from incompatible substances. |


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# Section 8: Exposure Controls/Personal Protection

| | Exposure Guidelines |
|---|---|
| **Hydrogen Sulfide** | HYDROGEN SULFIDE: 20 ppm OSHA ceiling 50 ppm OSHA peak 10 minute(s) (once if no other measurable exposure occurs) 10 ppm (14 mg/m3) OSHA TWA (vacated by 58 FR 35338, June 30, 1993) 15 ppm (21 mg/m3) OSHA STEL (vacated by 58 FR 35338, June 30, 1993) 10 ppm ACGIH TWA 15 ppm ACGIH STEL 10 ppm (15 mg/m3) NIOSH recommended ceiling 10 minute(s) TLV-TWA: 1ppm Upper respiratory irritation (ACGIH) |
| **Carbon Monoxide** | CARBON MONOXIDE: 50 ppm (55 mg/m3) OSHA TWA 35 ppm (40 mg/m3) OSHA TWA (vacated by 58 FR 35338, June 30, 1993) 200 ppm (229 mg/m3) OSHA ceiling (vacated by 58 FR 35338, June 30, 1993) 25 ppm ACGIH TWA 35 ppm (40 mg/m3) NIOSH recommended TWA 10 hour(s) 200 ppm (229 mg/m3) NIOSH recommended ceiling |
| **Methane** | METHANE, COMPRESSED GAS: ALIPHATIC HYDROCARBON GASES ALKANE (C1-C4): 1000 ppm ACGIH TWA METHANE: No occupational exposure limits established. ALIPHATIC HYDROCARBON GASES ALKANE (C1-C4): 1000 ppm ACGIH TWA |
| **Oxygen** | OXYGEN, COMPRESSED GAS: No occupational exposure limits established. |
| **Carbon Dioxide** | CARBON DIOXIDE, GAS: CARBON DIOXIDE: 5000 ppm (9000 mg/m3) OSHA TWA 10000 ppm (18000 mg/m3) OSHA TWA (vacated by 58 FR 35338, June 30, 1993) 30000 ppm (54000 mg/m3) OSHA STEL (vacated by 58 FR 35338, June 30, 1993) 5000 ppm ACGIH TWA 30000 ppm ACGIH STEL 5000 ppm (9000 mg/m3) NIOSH recommended TWA 10 hour(s) 30000 ppm (54000 mg/m3) NIOSH recommended STEL |
| **Nitrogen** | NITROGEN, COMPRESSED GAS: NITROGEN: ACGIH (simple asphyxiant) |

### Engineering Controls

Handle only in fully enclosed systems.

| | Eye Protection | Skin Protection | Respiratory Protection |
|---|---|---|---|
| **Hydrogen Sulfide** | Wear splash resistant safety goggles with a face shield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. | Wear appropriate chemical resistant clothing. | Any self-contained breathing apparatus with a full facepiece. |
| **Carbon Monoxide** | Eye protection not required, but recommended. | Protective clothing is not required. | Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. |
| **Methane** | Eye protection not required, but recommended. | Protective clothing is not required. | Respiratory protection may be needed for frequent or heavy exposure. Any self-contained breathing apparatus with a full facepiece. |
| **Oxygen** | Eye protection not required, but recommended. | Protective clothing is not required. | Respiratory protection may be needed for frequent or heavy exposure. |
| **Carbon Dioxide** | For the gas: Eye protection not required, but recommended. For the liquid: Wear splash resistant safety goggles. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. | For the gas: Protective clothing is not required. For the liquid: Wear appropriate protective, cold insulating clothing. | Any appropriate escape-type, self-contained breathing apparatus. |
| **Nitrogen** | Eye protection not required, but recommended. | Protective clothing is not required. | Respiratory protection may be needed for frequent or heavy exposure. |

### General Hygiene considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

# Section 9: Physical and Chemical Properties

| | Physical State | Appearance | Color | Change in Appearance | Physical Form | Odor | Taste |
|---|---|---|---|---|---|---|---|
| **Hydrogen Sulfide** | Gas | Colorless | Colorless | N/A | Gas | Rotten egg odor | N/A |
| **Carbon Monoxide** | Gas | Colorless | Colorless | N/A | Gas | Odorless | Tasteless |
| **Methane** | Gas | Colorless | Colorless | N/A | Gas | Odorless | Tasteless |
| **Oxygen** | Gas | Clear | Colorless | N/A | Gas | Odorless | Tasteless |
| **Carbon Dioxide** | Gas | Colorless | Colorless | N/A | Gas | Odorless | Acid taste |
| **Nitrogen** | Gas | Clear | Colorless | N/A | Gas | Odorless | Tasteless |

| | Flash Point | Flammability | Partition Coefficient | Autoignition Temperature | Upper Explosive Limits | Lower Explosive Limits |
|---|---|---|---|---|---|---|


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| | Flash Point | Flammability | Partition Coefficient | Autoignition Temperature | Upper Explosive Limits | Lower Explosive Limits |
|---|---|---|---|---|---|---|
| **Hydrogen Sulfide** | Flammable | Not available | Not available | 500 F (260 C) | 45.5% | 3.9% |
| **Carbon Monoxide** | Flammable | Not available | 1479.11 (log = 3.17) (estimated from water solubility) | 1128-1202 F (609-650 C) | 0.74 | 12.0-12.5% |
| **Methane** | -369 F (-223 C) | Not available | 724.44 (log = 2.87) (estimated from water solubility) | 999 F (537 C) | 15% | 5% |
| **Oxygen** | Not flammable | Not available | Not available | Nonflammable | Nonflammable | Nonflammable |
| **Carbon Dioxide** | Not flammable | Not available | N/A | Nonflammable | Nonflammable | Nonflammable |
| **Nitrogen** | Not flammable | Not available | Not available | Nonflammable | Nonflammable | Nonflammable |

| | Boiling Point | Freezing Point | Vapor Pressure | Vapor Density | Specific Gravity | Water Solubility | pH | Odor Threshold | Evaporation Rate | Viscosity |
|---|---|---|---|---|---|---|---|---|---|---|
| **Hydrogen Sulfide** | -78 to -77 F (-61 to -60.3 C) | -123 F (-86 C) | 15200 mmHg @ 25 C | 1.2 (Air=1) | 1.192 | 2.58-2.9% @ 20 C | 4.5-<7 (saturated solution) | 0.13 ppm | Not applicable | 0.0128 cP @ 25 C |
| **Carbon Monoxide** | -312.7 F (-191.5 C) | -326 F (-199 C) | 760 mmHg @ -191 C gas; cannot be liquefied at room temperature | 0.968 (Air=1) | Not applicable | 2.3% @ 20 C | Not applicable | Not available | Not applicable | 0.01657 cP @ 0 C |
| **Methane** | -260 F (-162 C) | -297 F (-183 C) | 760 mmHg @ -161 C | 0.555 (Air=1) | Not applicable | 3.5% @ 17 C | Not applicable | Not available | Not applicable | 0.01118 cP @ 27 C |
| **Oxygen** | -297 F (-183 C) | -360 F (-218 C) | 760 mmHg @ -183 C | 1.1 (Air=1) | Not applicable | 3.2% @ 25 C | Not applicable | Not available | Not applicable | 0.02075 cP @ 25 C |
| **Carbon Dioxide** | Not available | -71 F (-57 C) @ 4000 mmHg | 43700 mmHg @ 21 C | 1.5 (Air=1) | 1.522 @ 21 C | Soluble | 3.7 (saturated aqueous solution) @ 101.3 kPa (carbonic acid) | Not available | Not applicable | 0.01657 cP @ 0 C |
| **Nitrogen** | -321 F (-196 C) | -346 F (-210 C) | 760 mmHg @ -196 C | 0.967 (Air=1) | Not applicable | 1.6% @ 20 C | Not applicable | Not available | Not applicable | 0.01787 cP @ 27 C |

| | Molecular Weight | Molecular Formula | Density | Weight per Gallon | Volatility by Volume | Volatility | Solvent Solubility |
|---|---|---|---|---|---|---|---|
| **Hydrogen Sulfide** | 34.08 | H2-S | 1.539 g/L @ 0 C | Not available | Not available | Not applicable | Soluble: Carbon disulfide, alcohol, ether, glycerol, gasolines, kerosene, crude oil, alkali solutions |
| **Carbon Monoxide** | 28.01 | C-O | 1.250 g/L @ 0 C | Not available | 100% | Not applicable | Soluble: Alcohol, benzene, acetic acid, ethyl acetate, chloroform, cuprous chloride solutions |
| **Methane** | 16.04 | C-H4 | 0.717 g/L @ 0 C | Not available | Not applicable | Not applicable | Soluble: Alcohol, ether, benzene, organic solvents |
| **Oxygen** | 31.9988 | O2 | 1.309 g/L @ 25 C | Not available | Not applicable | Not applicable | Soluble: Alcohol |
| **Carbon Dioxide** | 44.01 | C-O2 | 0.114 | Not available | Not applicable | Not applicable | Soluble: Alcohol, acetone, hydrocarbons, organic solvents |
| **Nitrogen** | 28.0134 | N2 | 1.2506 g/L | Not available | 100% | 1 | Soluble: Liquid ammonia |


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# Section 10: Stability and Reactivity

| | Stability | Conditions to Avoid | Incompatible Materials |
|---|---|---|---|
| **Hydrogen Sulfide** | Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | Combustible materials, metals, oxidizing materials, halogens, metal oxides, metal salts, bases, rust, oxidants, oxygen, copper powder, acetaldehyde, silver fulminate |
| **Carbon Monoxide** | Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | Oxidizing materials, halogens, metal oxides, metals, combustible materials, lithium |
| **Methane** | Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | Halogens, oxidizing materials, combustible materials |
| **Oxygen** | Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | Combustible materials, halo carbons, metals, bases, reducing agents, amines, metal salts, oxidizing materials, alkaline earth and alkali metals |
| **Carbon Dioxide** | Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | Combustible materials, oxidizing materials, metal salts, reducing agents, metal carbide, metals, bases |
| **Nitrogen** | Stable at normal temperatures and pressure. | Stable at normal temperatures and pressure. | Metals, oxidizing materials |

| | Hazardous Decomposition Products | Possibility of Hazardous Reactions |
|---|---|---|
| **Hydrogen Sulfide** | Oxides of sulfur | Will not polymerize. |
| **Carbon Monoxide** | Oxides of carbon | Will not polymerize. |
| **Methane** | Oxides of carbon | Will not polymerize. |
| **Oxygen** | Miscellaneous decomposition products | Will not polymerize. |
| **Carbon Dioxide** | Carbon monoxide | Will not polymerize. |
| **Nitrogen** | Oxides of nitrogen | Will not polymerize. |

# Section 11: Toxicology Information

### Acute Effects

| | Oral LD50 | Dermal LD50 | Inhalation |
|---|---|---|---|
| **Hydrogen Sulfide** | 444 ppm inhalation-rat LC50 | Irritation 0.000125 ppm/5 hour(s) eyes-human | Irritation, lack of sense of smell, sensitivity to light, nausea, vomiting, difficulty breathing, headache, drowsiness, dizziness, disorientation, tremors, visual disturbances, suffocation, lung congestion, internal bleeding, heart damage, nerve damage, brain damage, coma, death |
| **Carbon Monoxide** | LC50 Inhalation Gas. Rat 1807 ppm 4 hours | Not available | Changes in body temperature, changes in blood pressure, nausea, vomiting, chest pain, difficulty breathing, irregular heartbeat, headache, drowsiness, dizziness, disorientation, hallucinations, pain in extremities, tremors, loss of coordination, hearing loss, visual disturbances, eye damage, suffocation, blood disorders, convulsions, coma |
| **Methane** | Not available | Not available | Nausea, vomiting, difficulty breathing, irregular heartbeat, headache, drowsiness, fatigue, dizziness, disorientation, mood swings, tingling sensation, loss of coordination, suffocation, convulsions, unconsciousness, coma |
| **Oxygen** | Not established | Not established | Irritation, changes in body temperature, nausea, difficulty breathing, irregular heartbeat, dizziness, disorientation, hallucinations, mood swings, pain in extremities, tremors, lung congestion, convulsions |
| **Carbon Dioxide** | Not established | Not established | Ringing in the ears, nausea, irregular heartbeat, headache, drowsiness, dizziness, tingling sensation, visual disturbances, suffocation, convulsions, coma |
| **Nitrogen** | Not available | Not available | Nausea, vomiting, difficulty breathing, headache, drowsiness, dizziness, tingling sensation, loss of coordination, convulsions, coma |

| | Eye Irritation | Skin Irritation | Sensitization |
|---|---|---|---|
| **Hydrogen Sulfide** | Irritation, sensitivity to light, visual disturbances | Irritation liquid: frostbite | Acute toxicity, Category 2, inhalation; H330: Fatal if inhaled. Specific Target Organ Toxicity (single exposure), Category 3; H335: May cause respiratory irritation. Hazardous to the aquatic environment, Acute Category 1; H400: Very toxic to aquatic life |
| **Carbon Monoxide** | No information on significant adverse effects | No information on significant adverse effects | Acute toxicity, Category 3, inhalation; H331: Toxic if inhaled. Reproductive toxicity, Category 1A; H360D: May damage the unborn child. Specific Target Organ Toxicity (repeated exposure), Category 1; H372: Causes damage to organs through prolonged or repeated exposure. |


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| | Eye Irritation | Skin Irritation | Sensitization |
|---|---|---|---|
| **Methane** | No information on significant adverse effects | No information on significant adverse effects | Difficulty breathing |
| **Oxygen** | No information on significant adverse effects | No information on significant adverse effects | No significant target effects reported. |
| **Carbon Dioxide** | Irritation, frostbite, blurred vision | Liquid: blisters, frostbite | Difficulty breathing |
| **Nitrogen** | Contact with rapidly expanding gas may cause burns or frostbite | No information on significant adverse effects | Difficulty breathing |

### Chronic Effects

| | Carcinogenicity | Mutagenicity | Reproductive Effects | Developmental Effects |
|---|---|---|---|---|
| **Hydrogen Sulfide** | Not available | Not available | Available. | No data |
| **Carbon Monoxide** | Not available | Available. | Available. | No data |
| **Methane** | Not available | Not available | Not available | No data |
| **Oxygen** | Not known. | Available. | Available. | No data |
| **Carbon Dioxide** | Not available | Not established | Available. | No data |
| **Nitrogen** | Not hazardous | Not available | Not available | No data |

## Section 12: Ecological Information

### Fate and Transport

| | Eco toxicity | Persistence / Degradability | Bioaccumulation / Accumulation | Mobility in Environment |
|---|---|---|---|---|
| **Hydrogen Sulfide** | Fish toxicity: Acute LC50 7 ug/L Fresh water Fish - Fathead minnow - Pimephales promelas - FRY 96 hours; 14.9 ug/L 96 hour(s) LC50 (Mortality) Fathead minnow (Pimeph<br>Invertibrate toxicity: 9730 ug/L 1.5 hour(s) (Mortality) Mediterranean mussel (Mytilus galloprovincialis)<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Highly toxic to aquatic life. | Not available | Not available |
| **Carbon Monoxide** | Fish toxicity: 75000 ug/L 1 day(s) LC100 (Mortality) Orangespotted sunfish (Lepomis humilis)<br>Invertibrate toxicity: Not available<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Relatively non-persistent in the environment. Highly volatile from water. | Not available | Not expected to leach through the soil or the sediment. |
| **Methane** | Fish toxicity: Not available<br>Invertibrate toxicity: Not available<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Relatively non-persistent in the environment. Moderately volatile from water. | Accumulates very little in the bodies of living organisms. | Not expected to leach through the soil or the sediment. |
| **Oxygen** | Fish toxicity: Not available<br>Invertibrate toxicity: Not available<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Not available | Low bioaccumulation | Not available |
| **Carbon Dioxide** | Fish toxicity: 150000 ug/L 48 day(s) (Mortality) Brown trout (Salmo trutta)<br>Invertibrate toxicity: Not available<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Relatively non-persistent in the environment. Moderately volatile from water. | Accumulates very little in the bodies of living organisms. | Leaches through the soil |
| **Nitrogen** | Fish toxicity: Not available<br>Invertibrate toxicity: Not available<br>Algal toxicity: Not available<br>Phyto toxicity: Not available<br>Other toxicity: Not available | Not available | Not available | Not available |


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# Section 13: Disposal Considerations

| | |
|---|---|
| **Hydrogen Sulfide** | Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): U135. |
| **Carbon Monoxide** | Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. |
| **Methane** | Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. |
| **Oxygen** | Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001. |
| **Carbon Dioxide** | Dispose in accordance with all applicable regulations. |
| **Nitrogen** | Dispose in accordance with all applicable regulations. |

# Section 14: Transportation Information

## U.S. DOT 49 CFR 172.101

### DOT Information For This Mixture

| | |
|---|---|
| **Shipping Name** | Compressed gas, n.o.s. (Nitrogen, Oxygen) |
| **UN Number** | UN1956 |
| **Hazard Class** | 2.2 |
| **Hazard Information** | Non-Flammable Gas |

### Individual Component Information

| | Proper Shipping Name | ID Number | Hazard Class or Division | Packing Group | Labeling Requirements | Passenger Aircraft or Railcar Quantity Limitations | Cargo Aircraft Only Quantity Limitations | Additional Shipping Description |
|---|---|---|---|---|---|---|---|---|
| **Hydrogen Sulfide** | Hydrogen sulfide | UN1053 | 2.3 | Not applicable | 2.3; 2.1 | Forbidden | Forbidden | Toxic-Inhalation Hazard Zone B |
| **Carbon Monoxide** | Carbon monoxide, compressed | UN1016 | 2.3 | Not applicable | 2.3; 2.1 | Forbidden | 25 kg | Toxic-Inhalation Hazard Zone D |
| **Methane** | Methane, compressed | UN1971 | 2.1 | Not applicable | 2.1 | Forbidden | 150 kg | N/A |
| **Oxygen** | Oxygen, compressed | UN1072 | 2.2 | Not available | 2.2; 5.1 | 75 kg or L | 150 kg | N/A |
| **Carbon Dioxide** | Carbon dioxide | UN1013 | 2.2 | Not applicable | 2.2 | 75 kg or L | 150kg | None |
| **Nitrogen** | Nitrogen, compressed | UN1066 | 2.2 | Not applicable | 2.2 | 75 kg or L | 150 kg | N/A |

## Canadian Transportation of Dangerous Goods

| | Shipping Name | UN Number | Class | Packing Group / Risk Group |
|---|---|---|---|---|
| **Hydrogen Sulfide** | HYDROGEN SULFIDE; or HYDROGEN SULPHIDE | UN1053 | 2.3; 2.1 | Not applicable |
| **Carbon Monoxide** | Carbon monoxide, compressed | UN1016 | 2.3; 2.1 | Not applicable |
| **Methane** | Methane, compressed | UN1971 | 2.1 | Not applicable |
| **Oxygen** | Oxygen, compressed | UN1072 | 2.2; 5.1 | Not applicable |
| **Carbon Dioxide** | Carbon dioxide | UN1013 | 2.2 | Not applicable |
| **Nitrogen** | Nitrogen, compressed | UN1066 | 2.2 | Not applicable |

# Section 15: Regulatory Information

## U.S. Regulations

| | CERCLA Sections | SARA 355.30 | SARA 355.40 |
|---|---|---|---|


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| | | | |
|---|---|---|---|
| **Hydrogen Sulfide** | 100 LBS RQ | 500 LBS TPQ | 100 LBS RQ |
| **Carbon Monoxide** | Not regulated. | Not regulated. | Not regulated. |
| **Methane** | Not regulated. | Not regulated. | Not regulated. |
| **Oxygen** | Not regulated. | Not regulated. | Not regulated. |
| **Carbon Dioxide** | Not regulated. | Not regulated. | Not regulated. |
| **Nitrogen** | Not regulated. | Not regulated. | Not regulated. |

### SARA 370.21

| | Acute | Chronic | Fire | Reactive | Sudden Release |
|---|---|---|---|---|---|
| **Hydrogen Sulfide** | Yes | No | Yes | No | Yes |
| **Carbon Monoxide** | Yes | No | Yes | No | Yes |
| **Methane** | Yes | No | Yes | No | Yes |
| **Oxygen** | No | No | Yes | No | Yes |
| **Carbon Dioxide** | Yes | No | No | No | Yes |
| **Nitrogen** | Yes | No | No | No | Yes |

### SARA 372.65

| | |
|---|---|
| **Hydrogen Sulfide** | HYDROGEN SULFIDE: Administrative stay issued Aug. 22, 1994 |
| **Carbon Monoxide** | Not regulated. |
| **Methane** | Not regulated. |
| **Oxygen** | Not regulated. |
| **Carbon Dioxide** | Not regulated. |
| **Nitrogen** | Not regulated. |

### OSHA Process Safety

| | |
|---|---|
| **Hydrogen Sulfide** | 1500 LBS TQ |
| **Carbon Monoxide** | Not regulated. |
| **Methane** | Not regulated. |
| **Oxygen** | Not regulated. |
| **Carbon Dioxide** | Not regulated. |
| **Nitrogen** | Not regulated. |

### State Regulations

| | CA Proposition 65 |
|---|---|
| **Hydrogen Sulfide** | Not regulated. |
| **Carbon Monoxide** | WARNING: This product can expose you to chemicals including Carbon Monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. |
| **Methane** | Not regulated. |
| **Oxygen** | Not regulated. |
| **Carbon Dioxide** | Not regulated. |
| **Nitrogen** | Not regulated. |

### Canadian Regulations

| | WHMIS Classification |
|---|---|
| **Hydrogen Sulfide** | A, B1, D1A, D2B. |
| **Carbon Monoxide** | A, B1, D1A, D2A. |
| **Methane** | A, B1 |
| **Oxygen** | A,C |
| **Carbon Dioxide** | A |
| **Nitrogen** | A |

### National Inventory Status

| | US Inventory (TSCA) | TSCA 12b Export Notification | Canada Inventory (DSL/NDSL) |
|---|---|---|---|
| **Hydrogen Sulfide** | Listed on inventory. | Not listed. | Listed on inventory. |
| **Carbon Monoxide** | Listed on inventory. | Not listed. | Listed on inventory. |
| **Methane** | Listed on inventory. | Not listed. | Listed on inventory. |
| **Oxygen** | Listed on inventory. | Not listed. | Not determined. |
| **Carbon Dioxide** | Listed on inventory. | Not listed. | Listed on inventory. |
| **Nitrogen** | Listed on inventory. | Not listed. | Listed on inventory. |


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## Section 16: Other Information

| | NFPA Rating |
|---|---|
| **Hydrogen Sulfide** | HEALTH=4 FIRE=4 REACTIVITY=0 |
| **Carbon Monoxide** | HEALTH=2 FIRE=4 REACTIVITY=0 |
| **Methane** | HEALTH=0 FIRE=4 REACTIVITY=0 |
| **Oxygen** | HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=OX |
| **Carbon Dioxide** | HEALTH=3 FIRE=0 REACTIVITY=0 SPECIAL=SA |
| **Nitrogen** | HEALTH=0 FIRE=0 REACTIVITY=0 SPECIAL=SA |

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard


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# SAFETY DATA SHEET

**Creation Date** 30-Oct-2009 **Revision Date** 24-Dec-2021 **Revision Number** 4

## 1. Identification

**Product Name** **Potassium hydrogen phthalate**

**Cat No. :** **AC177120000; AC177120025; AC177120050; AC177121000; AC177125000**

**CAS No** 877-24-7
**Synonyms** Potassium acid phthalate; Potassium biphthalate

**Recommended Use** Laboratory chemicals.
**Uses advised against** Food, drug, pesticide or biocidal product use.

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number** For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**
Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Label Elements**
None required

**Hazards not otherwise classified (HNOC)**
None identified

## 3. Composition/Information on Ingredients

| Component | CAS No | Weight % |
|---|---|---|
| 1,2-Benzenedicarboxylic acid, monopotassium salt | 877-24-7 | >95 |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation persists.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration.

**Ingestion** Do NOT induce vomiting. Get medical attention.

**Most important symptoms and effects** No information available.

**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available
**Method -** No information available

**Autoignition Temperature** No information available
**Explosion Limits**
**Upper** No data available
**Lower** No data available
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Keep product and empty container away from heat and sources of ignition. Thermal decomposition can lead to release of irritating gases and vapors.

**Hazardous Combustion Products**
Carbon monoxide (CO). Carbon dioxide ($CO_2$).
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 1 | 1 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

**Environmental Precautions** Should not be released into the environment. See Section 12 for additional Ecological Information.

**Methods for Containment and Clean Up** Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

## 7. Handling and storage

**Handling** Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

**Storage.** Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents.

## 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.

**Engineering Measures** None under normal use conditions.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** No protective equipment is needed under normal use conditions.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Solid |
| **Appearance** | White |
| **Odor** | Odorless |
| **Odor Threshold** | No information available |
| **pH** | 3.8-4.0 5% aq.sol |
| **Melting Point/Range** | 295 - 300 °C / 563 - 572 °F |
| **Boiling Point/Range** | No information available |
| **Flash Point** | No information available |
| **Evaporation Rate** | Not applicable |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | No information available |
| **Vapor Density** | Not applicable |
| **Specific Gravity** | No information available |
| **Solubility** | Slightly soluble in water |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | No information available |
| **Decomposition Temperature** | No information available |
| **Viscosity** | Not applicable |
| **Molecular Formula** | C8 H5 K O4 |
| **Molecular Weight** | 204.22 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products. Excess heat. Avoid dust formation.

**Incompatible Materials** Strong oxidizing agents

**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide ($CO_2$)

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information**

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| 1,2-Benzenedicarboxylic acid, monopotassium salt | LD50 > 3200 mg/kg ( Rat ) | >1000 mg/kg | Not listed |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| 1,2-Benzenedicarboxylic acid, monopotassium salt | 877-24-7 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity**

Do not empty into drains.

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT** Not regulated
**TDG** Not regulated
**IATA** Not regulated
**IMDG/IMO** Not regulated

## 15. Regulatory information

**United States of America Inventory**

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|---|---|---|---|---|
| 1,2-Benzenedicarboxylic acid, monopotassium salt | 877-24-7 | X | ACTIVE | - |

**Legend:**
**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

**International Inventories**
Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,2-Benzenedicarboxylic acid, monopotassium salt | 877-24-7 | X | - | 212-889-4 | X | X | X | X | X | KE-02310 |

**KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

**U.S. Federal Regulations**

**SARA 313** Not applicable

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA** - Occupational Safety and Health Administration Not applicable

**CERCLA** Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations** Not applicable

**U.S. Department of Transportation**
Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Authorisation/Restrictions according to EU REACH**

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|---|---|---|---|---|---|
| 1,2-Benzenedicarboxylic acid, monopotassium salt | 877-24-7 | Not applicable | Not applicable | Not applicable | Not applicable |

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|---|---|---|---|---|---|
| 1,2-Benzenedicarboxylic acid, monopotassium salt | 877-24-7 | Not applicable | Not applicable | Not applicable | Not applicable |

## 16. Other information

**Prepared By**
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Creation Date** 30-Oct-2009
**Revision Date** 24-Dec-2021
**Print Date** 24-Dec-2021
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**
**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text**

**End of SDS**

HORIBA

# SAFETY DATA SHEET

## Section 1. Product and Company Identification

Product Name: 525-4, 500-4, 560-4 (pH 4.01 buffer solution)

Product code: 3999960018, 3999960029, 3999960146

Recommended use: For laboratory and Industrial use

Manufacturer / Supplier: Horiba Instruments (Singapore) Pte Ltd
83 Science Park Drive, #02-02A, The Curie
Singapore-118258
Contact No: +65 69089600

## Section 2. Hazard identification

Classification of the Substance or Mixture: Mixture

The mixture is classified as not hazardous according to regulation (EC) 1272/2008, Globally Harmonized System (GHS)

GHS Label elements:

Signal word: No Signal word
Hazard statement: No Known significant effects or critical hazards

Precautionary statements:
General: Do not handle until all safety precautions have been read and understood

Other hazards which do not result in classification: None known

## Section 3. Composition/ information on ingredients

Substance or Mixture: Mixture

CAS Numbers other identifiers:

| Ingredients | CAS Number | Percentage |
|---|---|---|
| Potassium Hydrogen Phthalate | 877-24-7 | <2% |
| Water | 7732-18-5 | >98% |

*This product contains <0.01% other ingredient, not required to be listed as it is not hazardous to health and environment.*

*The exact percentage of composition has been withheld as a trade secret*

Chemical formula: Not applicable

## Section 4. First Aid Measures

Description of necessary first aid measures

| | |
|---|---|
| Eye contact: | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Remove any contact lenses. Get medical attention if irritation occurs. |
| Inhalation: | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| Skin contact: | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion: | Clean mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

Most important symptoms/effects, both acute and delayed

Potential acute health effects: No known significant effects or critical hazards

Over-exposure signs/symptoms: No specific data available

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See toxicological information (Section 11)

## Section 5. Firefighting Measures

Extinguishing Media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing Media: No Information available

Specific hazards arising from the substance or mixture: No specific information available

Hazardous thermal decomposition products: No Specific data

Special protective actions for Fire-fighters: Promptly isolate the scene by removing all persons from the incident if there is fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel"

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, water ways, soil and air

Methods and material for containment and cleaning up:

Method for Containment: Prevent further leakage or spillage if safe to do so.

Methods of cleaning up: Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

## Section 7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits: None

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

| | |
|---|---|
| Hand protection: | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. |
| Body protection: | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Other skin protection: | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory protection: | Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. |

## Section 9. Physical and chemical properties

| | |
|---|---|
| Appearance | |
| Physical state: | Liquid |
| Colour: | Colourless |
| Odour: | Odourless |
| Odour Threshold: | Not available |
| pH: | 4.01 |
| Melting Point: | Not available |
| Boiling Point: | 100° C |
| Flash point: | [Product does not sustain combustion.] |
| Evaporation rate: | Not available |
| Flammability (solid, gas): | Not available |
| Lower and upper explosive (Flammable) limits: | Not available |
| Vapour pressure: | Not available |
| Vapour density: | Not available |
| Relative density: | Not available |
| Partition coefficient n- octanol/water: | Not available |
| Auto-ignition temperature: | Not available |
| Decomposition temperature: | Not available |
| Viscosity: | Not available |

## Section 10. Stability and reactivity

| | |
|---|---|
| Reactivity: | No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability: | The product is stable |
| Possibility of hazardous reactions: | Hazardous reactions or instability may occur under certain conditions of storage or use. |
| Conditions to avoid: | No specific data |
| Incompatible materials: | No specific data |
| Hazardous decomposition Products: | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological Information

Information on toxicological effects

| | |
|---|---|
| Acute toxicity: | Not available |
| Irritation/Corrosion: | Not available |
| Sensitization: | Not available |
| Mutagenicity: | Not available |
| Carcinogenicity: | Not available |
| Reproductive toxicity: | Not available |
| Teratogenicity: | Not available |
| Specific target organ toxicity (single exposure): | Not available |
| Specific target organ toxicity (repeated exposure): | Not available |
| Aspiration hazard: | Not available |
| Information on the likely routes of exposure: | Not available |

Potential acute effects:

| | |
|---|---|
| Eye contact: | No known significant effects or critical hazards |
| Inhalation: | No known significant effects or critical hazards |
| Skin contact: | No known significant effects or critical hazards |
| Ingestion: | No known significant effects or critical hazards |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|---|---|
| Eye contact: | No specific data |
| Inhalation: | No specific data |
| Skin contact: | No specific data |
| Ingestion: | No specific data |

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

| | |
|---|---|
| Potential immediate effects: | Not available |
| Potential delayed effects: | Not available |

Long term exposure

| | |
|---|---|
| Potential immediate effects | Not available |
| Potential delayed effects: | Not available |

| | |
|---|---|
| Potential chronic health effects: | Not available |
| General: | No known significant effects or critical hazards |
| Carcinogenicity: | No known significant effects or critical hazards |
| Mutagenicity: | No known significant effects or critical hazards |
| Teratogenicity: | No known significant effects or critical hazards |
| Developmental effects: | No known significant effects or critical hazards |
| Fertility effects: | No known significant effects or critical hazards |

Numerical measures of toxicity

| | |
|---|---|
| Acute toxicity estimates: | Not available |

## Section 12. Ecological information

| | |
|---|---|
| Toxicity: | Not available |
| Persistence/degradability: | Not available |

Bio accumulative potential: Not available

Mobility in soil
Soil/water
partition coefficient ($K_{OC}$): Not available

Other adverse effects: No known significant effects or critical hazards.

## Section 13. Disposal consideration

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

| | UN | IMDG | IATA |
|---|---|---|---|
| UN number | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - |
| Transport hazard class(es) | - | - | - |
| Packing group | - | - | - |
| Environmental hazards | No. | No. | No. |
| Additional information | - | - | - |

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture.
International Inventories:
USINV Complies

| | |
|---|---|
| CANINV | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Key of abbreviation:
USINV / TSCA: United States Toxic Substanc3es Control Act Section 8(b) Inventory
CANINV / DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS: European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS: Japanese Existing and New Chemical Substances
IECSC: Chinese Inventory of Existing Chemical Substances
KECL: Korean Existing and Evaluated Chemical Substances
PICCS: Philippines Inventory of Chemical and Chemical Substances
AICS: Australian Inventory of Chemical Substances

Chemical safety assessment:
A chemical safety assessment according to regulation (EC) No: 1907/2006 is not required.

## Section 16. Other information

History:

Date of issue: 6 March 2018

Key of abbreviation:
ATE: Acute Toxicity Estimate
BCF: Bioconcentration Factor
GHS: Globally harmonized System of classification and labelling of chemicals
IATA: International Air Transport Association
IBC= Intermediate Bulk Container
IMDG International maritime Dangerous goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above- named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

HORIBA

# SAFETY DATA SHEET

## Section 1. Product and Company Identification

Product Name: 525-7, 500-7, 560-7 (pH 7 buffer solution)

Product code: 3999960020, 3999960031, 3999960147

Recommended use: For laboratory and Industrial use

Manufacturer / Supplier: Horiba Instruments (Singapore) Pte Ltd
83 Science Park Drive, #02-02A, The Curie
Singapore-118258
Contact No: +65 69089600

## Section 2. Hazard identification

Classification of the Substance or Mixture: Mixture

The mixture is classified as not hazardous according to regulation (EC) 1272/2008, Globally Harmonized System (GHS)

GHS Label elements:

Signal word: No Signal word
Hazard statement: No Known significant effects or critical hazards

Precautionary statements:
General: Do not handle until all safety precautions have been read and understood

Other hazards which do not result in classification: None known

## Section 3. Composition/ information on ingredients

Substance or Mixture: Mixture

CAS Numbers other identifiers:

| Ingredients | CAS Number | Percentage |
|---|---|---|
| Potassium Dihydrogen Phosphate | 7778-77-0 | <1% |
| Disodium Hydrogen Phosphate | 7558-79-4 | <1% |
| Water | 7732-18-5 | >98% |

*This product contains <0.01% other ingredient, not required to be listed as it is not hazardous to health and environment.*

*The exact percentage of composition has been withheld as a trade secret*

Chemical formula: Not applicable

## Section 4. First Aid Measures

Description of necessary first aid measures

| | |
|---|---|
| Eye contact: | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Remove any contact lenses. Get medical attention if irritation occurs. |
| Inhalation: | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| Skin contact: | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion | Clean mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

Most important symptoms/effects, both acute and delayed

Potential acute health effects: No known significant effects or critical hazards

Over-exposure signs/symptoms: No specific data available

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See toxicological information (Section 11)

## Section 5. Firefighting Measures

Extinguishing Media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing Media: No Information available

Specific hazards arising from the substance or mixture: No specific information available

Hazardous thermal decomposition products: No Specific data

Special protective actions for Fire-fighters: Promptly isolate the scene by removing all persons from the incident if there is fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in section 8 on suitable and unsuitable materials. See also the information in “For non-emergency personnel”

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, water ways, soil and air

Methods and material for containment and cleaning up:

Method for Containment: Prevent further leakage or spillage if safe to do so.

Methods of cleaning up: Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

## Section 7. Handling and storage

Precautions for safe handling
Protective measures: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits: None

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures
Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

| | |
|---|---|
| Hand protection: | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. |
| Body protection: | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Other skin protection: | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory protection: | Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. |

## Section 9. Physical and chemical properties

| | |
|---|---|
| Appearance | |
| Physical state: | Liquid |
| Colour: | Colourless |
| Odour: | Odourless |
| Odour Threshold: | Not available |
| pH: | 6.86 |
| Melting Point: | Not available |
| Boiling Point: | 100° C |
| Flash point: | [Product does not sustain combustion.] |
| Evaporation rate: | Not available |
| Flammability (solid, gas): | Not available |
| Lower and upper explosive (Flammable) limits: | Not available |
| Vapour pressure: | Not available |
| Vapour density: | Not available |
| Relative density: | Not available |
| Partition coefficient n- octanol/water: | Not available |
| Auto-ignition temperature: | Not available |
| Decomposition temperature: | Not available |
| Viscosity: | Not available |

## Section 10. Stability and reactivity

| | |
|---|---|
| Reactivity: | No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability: | The product is stable |
| Possibility of hazardous reactions: | Hazardous reactions or instability may occur under certain conditions of storage or use. |
| Conditions to avoid: | No specific data |
| Incompatible materials: | No specific data |
| Hazardous decomposition Products: | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological Information

Information on toxicological effects

| | |
|---|---|
| Acute toxicity: | Not available |
| Irritation/Corrosion: | Not available |
| Sensitization: | Not available |
| Mutagenicity: | Not available |
| Carcinogenicity: | Not available |
| Reproductive toxicity: | Not available |
| Teratogenicity: | Not available |
| Specific target organ toxicity (single exposure): | Not available |
| Specific target organ toxicity (repeated exposure): | Not available |
| Aspiration hazard: | Not available |
| Information on the likely routes of exposure: | Not available |

Potential acute effects:

| | |
|---|---|
| Eye contact: | No known significant effects or critical hazards |
| Inhalation: | No known significant effects or critical hazards |
| Skin contact: | No known significant effects or critical hazards |
| Ingestion: | No known significant effects or critical hazards |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|---|---|
| Eye contact: | No specific data |
| Inhalation: | No specific data |
| Skin contact: | No specific data |
| Ingestion: | No specific data |

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

| | |
|---|---|
| Potential immediate effects: | Not available |
| Potential delayed effects: | Not available |

Long term exposure

| | |
|---|---|
| Potential immediate effects: | Not available |
| Potential delayed effects: | Not available |

Potential chronic health effects: Not available

| | |
|---|---|
| General: | No known significant effects or critical hazards |
| Carcinogenicity: | No known significant effects or critical hazards |
| Mutagenicity: | No known significant effects or critical hazards |
| Teratogenicity: | No known significant effects or critical hazards |
| Developmental effects: | No known significant effects or critical hazards |
| Fertility effects: | No known significant effects or critical hazards |

Numerical measures of toxicity

Acute toxicity estimates: Not available

## Section 12. Ecological information

Toxicity: Not available

Persistence/degradability: Not available

Bio accumulative potential: Not available

Mobility in soil

Soil/water partition coefficient ($K_{OC}$): Not available

Other adverse effects: No known significant effects or critical hazards.

## Section 13. Disposal consideration

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

| | UN | IMDG | IATA |
|---|---|---|---|
| UN number | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - |
| Transport hazard class(es) | - | - | - |
| Packing group | - | - | - |
| Environmental hazards | No. | No. | No. |
| Additional information | - | - | - |

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture.

International Inventories:

| | |
|---|---|
| USINV | Complies |
| CANINV | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |

| | |
|---|---|
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Key of abbreviation:
USINV / TSCA: United States Toxic Substanc3es Control Act Section 8(b) Inventory
CANINV / DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS: European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS: Japanese Existing and New Chemical Substances
IECSC: Chinese Inventory of Existing Chemical Substances
KECL: Korean Existing and Evaluated Chemical Substances
PICCS: Philippines Inventory of Chemical and Chemical Substances
AICS: Australian Inventory of Chemical Substances

Chemical safety assessment:
A chemical safety assessment according to regulation (EC) No: 1907/2006 is not required.

## Section 16. Other information

History:

Date of issue: 28 Feb 2018

Key of abbreviation:
ATE: Acute Toxicity Estimate
BCF: Bioconcentration Factor
GHS: Globally harmonized System of classification and labelling of chemicals
IATA: International Air Transport Association
IBC= Intermediate Bulk Container
IMDG International maritime Dangerous goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above- named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

HORIBA

# SAFETY DATA SHEET

## Section 1. Product and Company Identification

Product Name: 525-10, 500-10, 560-10 (pH 10.01 buffer solution)

Product code: 3999960022, 3999960033, 3999960138

Recommended use: For laboratory and Industrial use

Manufacturer / Supplier: Horiba Instruments (Singapore) Pte Ltd
83 Science Park Drive, #02-02A, The Curie
Singapore-118258
Contact No: +65 69089600

## Section 2. Hazard identification

Classification of the Substance or Mixture: Mixture

The mixture is classified as not hazardous according to regulation (EC) 1272/2008, Globally Harmonized System (GHS)

GHS Label elements:

Signal word: No Signal word
Hazard statement: No Known significant effects or critical hazards

Precautionary statements:
General: Do not handle until all safety precautions have been read and understood

Other hazards which do not result in classification: None known

## Section 3. Composition/ information on ingredients

Substance or Mixture: Mixture

CAS Numbers other identifiers:

| Ingredients | CAS Number | Percentage |
|---|---|---|
| Sodium Carbonate | 497-19-8 | <1% |
| Sodium Bicarbonate | 144-55-8 | <1% |
| Water | 7732-18-5 | >98% |

*This product contains <0.01% other ingredient, not required to be listed as it is not hazardous to health and environment.*

*The exact percentage of composition has been withheld as a trade secret*

Chemical formula: Not applicable

## Section 4. First Aid Measures

Description of necessary first aid measures

| | |
|---|---|
| Eye contact: | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Remove any contact lenses. Get medical attention if irritation occurs. |
| Inhalation: | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| Skin contact: | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion | Clean mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

Most important symptoms/effects, both acute and delayed

Potential acute health effects: No known significant effects or critical hazards

Over-exposure signs/symptoms: No specific data available

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See toxicological information (Section 11)

## Section 5. Firefighting Measures

Extinguishing Media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing Media: No Information available

Specific hazards arising from the substance or mixture: No specific information available

Hazardous thermal decomposition products: No Specific data

Special protective actions for Fire-fighters: Promptly isolate the scene by removing all persons from the incident if there is fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate

surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material

For emergency responders: If specialized clothing is required to deal with the spillage, take note of any information in section 8 on suitable and unsuitable materials. See also the information in “For non-emergency personnel”

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, water ways, soil and air

Methods and material for containment and cleaning up:

Method for Containment: Prevent further leakage or spillage if safe to do so.

Methods of cleaning up: Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

## Section 7. Handling and storage

Precautions for safe handling
Protective measures: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits: None

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures
Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with

side-shields.

Skin protection

| | |
|---|---|
| Hand protection: | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. |
| Body protection: | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Other skin protection: | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory protection: | Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. |

## Section 9. Physical and chemical properties

Appearance

| | |
|---|---|
| Physical state: | Liquid |
| Colour: | Colourless |
| Odour: | Odourless |
| Odour Threshold: | Not available |
| pH: | 10.01 |
| Melting Point: | Not available |
| Boiling Point: | 100° C |
| Flash point: | [Product does not sustain combustion.] |
| Evaporation rate: | Not available |
| Flammability (solid, gas): | Not available |
| Lower and upper explosive (Flammable) limits: | Not available |
| Vapour pressure: | Not available |
| Vapour density: | Not available |
| Relative density: | Not available |
| Partition coefficient n- octanol/water: | Not available |
| Auto-ignition temperature: | Not available |
| Decomposition temperature: | Not available |
| Viscosity: | Not available |

## Section 10. Stability and reactivity

| | |
|---|---|
| Reactivity: | No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability: | The product is stable |
| Possibility of hazardous reactions: | Hazardous reactions or instability may occur under certain conditions of storage or use. |
| Conditions to avoid: | No specific data |
| Incompatible materials: | No specific data |
| Hazardous decomposition | |

| | |
|---|---|
| Products: | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological Information

Information on toxicological effects

| | |
|---|---|
| Acute toxicity: | Not available |
| Irritation/Corrosion: | Not available |
| Sensitization: | Not available |
| Mutagenicity: | Not available |
| Carcinogenicity: | Not available |
| Reproductive toxicity: | Not available |
| Teratogenicity: | Not available |
| Specific target organ: toxicity (single exposure): | Not available |
| Specific target organ toxicity (repeated exposure): | Not available |
| Aspiration hazard: | Not available |
| Information on the likely routes of exposure: | Not available |

Potential acute effects:

| | |
|---|---|
| Eye contact: | No known significant effects or critical hazards |
| Inhalation: | No known significant effects or critical hazards |
| Skin contact: | No known significant effects or critical hazards |
| Ingestion: | No known significant effects or critical hazards |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|---|---|
| Eye contact: | No specific data. |
| Inhalation: | No specific data. |
| Skin contact: | No specific data. |
| Ingestion: | No specific data. |

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

| | |
|---|---|
| Potential immediate effect: | Not available |
| Potential delayed effects: | Not available |

Long term exposure

| | |
|---|---|
| Potential immediate effects: | Not available |
| Potential delayed effects: | Not available |

| | |
|---|---|
| Potential chronic health effects: | Not available |
| General: | No known significant effects or critical hazards |
| Carcinogenicity: | No known significant effects or critical hazards |
| Mutagenicity: | No known significant effects or critical hazards |
| Teratogenicity: | No known significant effects or critical hazards |
| Developmental effects: | No known significant effects or critical hazards |
| Fertility effects: | No known significant effects or critical hazards |

Numerical measures of toxicity

| | |
|---|---|
| Acute toxicity estimates: | Not available |

## Section 12. Ecological information

| | |
|---|---|
| Toxicity: | Not available |
| Persistence/degradability: | Not available |
| Bio accumulative potential: | Not available |

Mobility in soil
Soil/water partition coefficient ($K_{OC}$): Not available

Other adverse effects: No known significant effects or critical hazards.

## Section 13. Disposal consideration

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

| | UN | IMDG | IATA |
|---|---|---|---|
| UN number | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - |
| Transport hazard class(es) | - | - | - |
| Packing group | - | - | - |
| Environmental hazards | No. | No. | No. |
| Additional information | - | - | - |

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture.
International Inventories:

| | |
|---|---|
| USINV | Complies |
| CANINV | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |

| | |
|---|---|
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Key of abbreviation:
USINV / TSCA: United States Toxic Substanc3es Control Act Section 8(b) Inventory
CANINV / DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS: European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS: Japanese Existing and New Chemical Substances
IECSC: Chinese Inventory of Existing Chemical Substances
KECL: Korean Existing and Evaluated Chemical Substances
PICCS: Philippines Inventory of Chemical and Chemical Substances
AICS: Australian Inventory of Chemical Substances

Chemical safety assessment:
A chemical safety assessment according to regulation (EC) No: 1907/2006 is not required.

## Section 16. Other information

History:

Date of issue: 6 March 2018

Key of abbreviation:
ATE: Acute Toxicity Estimate
BCF: Bioconcentration Factor
GHS: Globally harmonized Syatem of classification and labelling of chemicals
IATA: International Air Transport Association
IBC= Intermediate Bulk Container
IMDG International maritime Dangerous goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above- named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

HORIBA

# SAFETY DATA SHEET

## Section 1. Product and Company Identification

Product Name: 525-3; 560-3 (internal filling solution for pH combination electrode)

Product code: 3999960023; 3999960139

Recommended use: For laboratory and Industrial use

Manufacturer / Supplier: Horiba Instruments (Singapore) Pte Ltd
83 Science Park Drive, #02-02A, The Curie
Singapore-118258
Contact No: +65 69089660

## Section 2. Hazard identification

Classification of the Substance or Mixture: Mixture

The mixture is classified as not hazardous according to regulation (EC) 1272/2008, Globally Harmonized System (GHS)

GHS Label elements:

Signal word: No Signal word
Hazard statement: No Known significant effects or critical hazards

Precautionary statements:
General: Do not handle until all safety precautions have been read and understood

Other hazards which do not result in classification: None known

## Section 3. Composition/ information on ingredients

Substance or Mixture: Mixture

CAS Numbers other identifiers:

| Ingredients | CAS Number | Percentage |
|---|---|---|
| Potassium Chloride | 7447-40-7 | <25% |
| Water | 7732-18-5 | >75% |

The exact percentage of composition has been withheld as a trade secret

Chemical formula: Not applicable

## Section 4. First Aid Measures

Description of necessary first aid measures

| | |
|---|---|
| Eye contact: | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Remove any contact lenses. Get medical attention if irritation occurs. |
| Inhalation: | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| Skin contact: | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion: | Clean mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

Most important symptoms/effects, both acute and delayed

Potential acute health effects:

Eye contact: Causes eye irritation

Over-exposure signs/symptoms: No specific data available

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See toxicological information (Section 11)

## Section 5. Firefighting Measures

Extinguishing Media

| | |
|---|---|
| Suitable extinguishing media: | Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing Media: | No Information available |
| Specific hazards arising from the substance or mixture: | No specific information available |
| Hazardous thermal decomposition products: | No Specific data |
| Special protective actions for Fire-fighters: | Promptly isolate the scene by removing all persons from the incident if there is fire. No action shall be taken involving any personal risk or without suitable training |
| Special protective equipment for fire-fighters | Fire-fighters should wear appropriate protective equipment self- contained breathing apparatus with a full face-piece operated in positive pressure mode. |

## Section 6. Accidental release Measures

Personal precautions, protective equipment and emergency procedures

| | |
|---|---|
| For non-emergency personnel: | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. |
| For emergency responders: | If specialized clothing is required to deal with the spillage, take note of any information |

In section 8 on suitable and unsuitable materials. See also the information in “For non-emergency personnel”.

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, water ways, soil and air.

Methods and material for containment and cleaning up:

Method for Containment: Prevent further leakage or spillage if safe to do so.

Methods of cleaning up: Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

## Section 7. Handling and storage

Precautions for safe handling
Protective measures: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

Control parameters
Occupational exposure limits: None

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process Equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures
Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection
Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should

| | |
|---|---|
| | be worn at all times when handling chemical products if a risk assessment indicates this is necessary. |
| Body protection: | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Other skin protection: | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory protection: | Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. |

## Section 9. Physical and chemical properties

| | |
|---|---|
| Appearance | |
| Physical state: | Liquid |
| Colour: | Colourless |
| Odour: | Odourless |
| Odour Threshold: | Not available |
| pH: | Not available |
| Melting Point: | Not available |
| Boiling Point: | 100° C |
| Flash point: | [Product does not sustain combustion.] |
| Evaporation rate: | Not available |
| Flammability (solid, gas): | Not available |
| Lower and upper explosive: (Flammable) limits | Not available |
| Vapour pressure: | Not available |
| Vapour density: | Not available |
| Relative density: | Not available |
| Partition coefficient: n- octanol/water | Not available |
| Auto-ignition temperature: | Not available |
| Decomposition temperature: | Not available |
| Viscosity: | Not available |

## Section 10. Stability and reactivity

| | |
|---|---|
| Reactivity: | No specific test data related to reactivity available for this product or its ingredients |
| Chemical stability: | The product is stable |
| Possibility of hazardous: | Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid: | No specific data |
| Incompatible materials: | No specific data |
| Hazardous decomposition: Products | Under normal conditions of storage and use, hazardous decomposition products should be produced |

## Section 11. Toxicological Information

Information on toxicological effects

| | |
|---|---|
| Acute toxicity: | Not available |
| Irritation/Corrosion: | Not available |
| Sensitization: | Not available |
| Mutagenicity: | Not available |
| Carcinogenicity: | Not available |
| Reproductive toxicity: | Not available |
| Teratogenicity: | Not available |
| Specific target organ toxicity (single exposure): | Not available |
| Specific target organ: toxicity (repeated exposure): | Not available |
| Aspiration hazard: | Not available |
| Information on the likely: routes of exposure | Not available |

Potential acute health effects:

| | |
|---|---|
| Eye contact: | Causes eye irritation |
| Inhalation: | No known significant effects or critical hazards |
| Skin contact: | No known significant effects or critical hazards |
| Ingestion: | No known significant effects or critical hazards |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|---|---|
| Eye contact: | Adverse symptoms may include irritation, watering and redness |
| Inhalation: | No specific data |
| Skin contact: | No specific data |
| Ingestion: | No specific data |

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

| | |
|---|---|
| Potential immediate: effects | Not available |
| Potential delayed effects: | Not available |

Long term exposure

| | |
|---|---|
| Potential immediate: effects | Not available |
| Potential delayed effects: | Not available |

| | |
|---|---|
| Potential chronic health effects: | Not available |
| General: | No known significant effects or critical hazards |
| Carcinogenicity: | No known significant effects or critical hazards |
| Mutagenicity: | No known significant effects or critical hazards |
| Teratogenicity: | No known significant effects or critical hazards |
| Developmental effects: | No known significant effects or critical hazards |
| Fertility effects: | No known significant effects or critical hazards |

Numerical measures of toxicity

| | |
|---|---|
| Acute toxicity estimates: | Not available |

## Section 12. Ecological information

Toxicity: Not available

Persistence/degradability: Not available

Bio accumulative potential: Not available

Mobility in soil
Soil/water
partition coefficient ($K_{OC}$): Not available

Other adverse effects: No known significant effects or critical hazards.

## Section 13. Disposal consideration

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

| | UN | IMDG | IATA |
|---|---|---|---|
| UN number | Not regulated. | Not regulated. | Not regulated. |
| UN proper shipping name | - | - | - |
| Transport hazard class(es) | - | - | - |
| Packing group | - | - | - |
| Environmental hazards | No. | No. | No. |
| Additional information | - | - | - |

Special precautions for user: Transport within user's premises: always transport in closed containers that are ` upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture.
International Inventories:

| | |
|---|---|
| USINV | Complies |
| CANINV | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Key of abbreviation:
USINV / TSCA: United States Toxic Substanc3es Control Act Section 8(b) Inventory
CANINV / DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS: European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
ENCS: Japanese Existing and New Chemical Substances
IECSC: Chinese Inventory of Existing Chemical Substances
KECL: Korean Existing and Evaluated Chemical Substances
PICCS: Philippines Inventory of Chemical and Chemical Substances
AICS: Australian Inventory of Chemical Substances

Chemical safety assessment:
A chemical safety assessment according to regulation (EC) No: 1907/2006 is not required.

## Section 16. Other information

History:

Date of issue: 8 March 2018

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ATE: Acute Toxicity Estimate

BCF: Bioconcentration Factor

GHS: Globally harmonized Syatem of classification and labelling of chemicals

IATA: International Air Transport Association

IBC= Intermediate Bulk Container

IMDG International maritime Dangerous goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

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# SAFETY DATA SHEET

Isobutylene

## Section 1. Identification

**GHS product identifier** : Isobutylene

**Chemical name** : 2-methylpropene

**Other means of identification** : 1-Propene, 2-methyl-; Isobutene; Isobutylene; 1-Propene, 2-methyl- (isobutene); 1, 1-Dimethylethylene; Isopropylidenemethylene; iso-Butene; i-Butene; 2-Methylpropylene; 2-Methyl-2-propene; 2-Methyl-1-propene

**Product type** : Gas.

**Product use** : Synthetic/Analytical chemistry.

**Synonym** : 1-Propene, 2-methyl-; Isobutene; Isobutylene; 1-Propene, 2-methyl- (isobutene); 1, 1-Dimethylethylene; Isopropylidenemethylene; iso-Butene; i-Butene; 2-Methylpropylene; 2-Methyl-2-propene; 2-Methyl-1-propene

**SDS #** : 001031

**Supplier's details** : Airgas USA, LLC and its affiliates
259 North Radnor-Chester Road
Suite 100
Radnor, PA 19087-5283
1-610-687-5253

**24-hour telephone** : 1-866-734-3438

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : FLAMMABLE GASES - Category 1
GASES UNDER PRESSURE - Liquefied gas

**GHS label elements**

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Extremely flammable gas.
May form explosive mixtures with air.
Contains gas under pressure; may explode if heated.
May displace oxygen and cause rapid suffocation.

**Precautionary statements**

**General** : Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Always keep container in upright position. Approach suspected leak area with caution.

**Prevention** : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Response** : Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.

**Storage** : Protect from sunlight. Store in a well-ventilated place.

**Disposal** : Not applicable.

**Hazards not otherwise classified** : In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.

# Section 3. Composition/information on ingredients

**Substance/mixture** : Substance

**Chemical name** : 2-methylpropene

**Other means of identification** : 1-Propene, 2-methyl-; Isobutene; Isobutylene; 1-Propene, 2-methyl- (isobutene); 1, 1-Dimethylethylene; Isopropylidenemethylene; iso-Butene; i-Butene; 2-Methylpropylene; 2-Methyl-2-propene; 2-Methyl-1-propene

**Product code** : 001031

## CAS number/other identifiers

**CAS number** : 115-11-7

| Ingredient name | % | CAS number |
|---|---|---|
| Isobutylene | 100 | 115-11-7 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

# Section 4. First aid measures

## Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : As this product is a gas, refer to the inhalation section.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Frostbite** : Try to warm up the frozen tissues and seek medical attention.

**Ingestion** : As this product is a gas, refer to the inhalation section.

### Over-exposure signs/symptoms

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

## Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

# Section 4. First aid measures

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicological information (Section 11)**

# Section 5. Fire-fighting measures

## Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# Section 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

## Methods and materials for containment and cleaning up

**Small spill** : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

**Large spill** : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

Use only non-sparking tools. Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F). Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| Ingredient name | Exposure limits |
|---|---|
| Isobutylene | **ACGIH TLV (United States, 3/2017).** TWA: 250 ppm 8 hours. |

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

## Skin protection

## Section 8. Exposure controls/personal protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

**Appearance**

**Physical state** : Gas. [Compressed gas.]

**Color** : Colorless.

**Odor** : Characteristic.

**Odor threshold** : Not available.

**pH** : Not available.

**Melting point** : -140.7°C (-221.3°F)

**Boiling point** : -6.9°C (19.6°F)

**Critical temperature** : 144.75°C (292.6°F)

**Flash point** : Closed cup: -76.1°C (-105°F)

**Evaporation rate** : Not available.

**Flammability (solid, gas)** : Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and oxidizing materials.

**Lower and upper explosive (flammable) limits** : Lower: 1.8%
Upper: 9.6%

**Vapor pressure** : 24.3 (psig)

**Vapor density** : 1.94 (Air = 1)

**Specific Volume (ft $^3$/lb)** : 6.6845

**Gas Density (lb/ft $^3$)** : 0.1496 (25°C / 77 to °F)

**Relative density** : Not applicable.

**Solubility** : Not available.

**Solubility in water** : 0.26 g/l

**Partition coefficient: n-octanol/water** : 2.34

**Auto-ignition temperature** : 465°C (869°F)

**Decomposition temperature** : Not available.

**Viscosity** : Not applicable.

**Flow time (ISO 2431)** : Not available.

**Molecular weight** : 56.12 g/mole

**Aerosol product**

**Heat of combustion** : -45029034 J/kg

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

**Incompatible materials** : Oxidizers

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| Isobutylene | LC50 Inhalation Vapor | Rat | 550000 mg/m³ | 4 hours |

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

# Section 11. Toxicological information

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : As this product is a gas, refer to the inhalation section.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## Numerical measures of toxicity

### Acute toxicity estimates

Not available.

# Section 12. Ecological information

## Toxicity

Not available.

## Persistence and degradability

Not available.

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Isobutylene | 2.34 | - | low |

## Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

# Section 12. Ecological information

**Other adverse effects** : No known significant effects or critical hazards.

# Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

# Section 14. Transport information

| | DOT | TDG | Mexico | IMDG | IATA |
|---|---|---|---|---|---|
| **UN number** | UN1055 | UN1055 | UN1055 | UN1055 | UN1055 |
| **UN proper shipping name** | ISOBUTYLENE | ISOBUTYLENE | ISOBUTYLENE | ISOBUTYLENE | ISOBUTYLENE |
| **Transport hazard class(es)** | 2.1   | 2.1   | 2.1   | 2.1   | 2.1   |
| **Packing group** | - | - | - | - | - |
| **Environmental hazards** | No. | No. | No. | No. | No. |

**"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."**

**Additional information**

**DOT Classification** : **Limited quantity** Yes.
**Quantity limitation** Passenger aircraft/rail: Forbidden. Cargo aircraft: 150 kg.
**Special provisions** 19, T50

**TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2).
**Explosive Limit and Limited Quantity Index** 0.125
**ERAP Index** 3000
**Passenger Carrying Ship Index** Forbidden
**Passenger Carrying Road or Rail Index** Forbidden
**Special provisions** 29

**IATA** : **Quantity limitation** Passenger and Cargo Aircraft: Forbidden. Cargo Aircraft Only: 150 kg.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

# Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

**Clean Air Act (CAA) 112 regulated flammable substances**: Isobutylene

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : Refer to Section 2: Hazards Identification of this SDS for classification of substance.

**State regulations**

**Massachusetts** : This material is listed.

**New York** : This material is not listed.

**New Jersey** : This material is listed.

**Pennsylvania** : This material is listed.

**International regulations**

**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

**Montreal Protocol (Annexes A, B, C, E)**

Not listed.

**Stockholm Convention on Persistent Organic Pollutants**

Not listed.

**Rotterdam Convention on Prior Informed Consent (PIC)**

Not listed.

**UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**Inventory list**

**Australia** : This material is listed or exempted.

**Canada** : This material is listed or exempted.

**China** : This material is listed or exempted.

**Europe** : This material is listed or exempted.

**Japan** : **Japan inventory (ENCS)**: This material is listed or exempted.
**Japan inventory (ISHL)**: Not determined.

**Malaysia** : Not determined.

**New Zealand** : This material is listed or exempted.

**Philippines** : This material is listed or exempted.

**Republic of Korea** : This material is listed or exempted.

# Section 15. Regulatory information

**Taiwan** : This material is listed or exempted.

**Thailand** : Not determined.

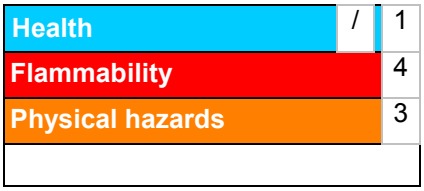
**Turkey** : Not determined.

**United States** : This material is listed or exempted.

**Viet Nam** : Not determined.

# Section 16. Other information

## Hazardous Material Information System (U.S.A.)




**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.**

**The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.**

## National Fire Protection Association (U.S.A.)




**Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.**

**Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.**

## Procedure used to derive the classification

| Classification | Justification |
|---|---|
| FLAMMABLE GASES - Category 1<br>GASES UNDER PRESSURE - Liquefied gas | Expert judgment<br>Expert judgment |

## History

**Date of printing** : 5/10/2018

**Date of issue/Date of revision** : 5/10/2018

**Date of previous issue** : 7/11/2016

**Version** : 0.02

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

# Section 16. Other information

as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

**References** : Not available.

**Notice to reader**

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**
**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**

# SAFETY DATA SHEET

Version 4.10
Revision Date 04/22/2016
Print Date 05/01/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Sudan Blue II

Product Number : 306436
Brand : Sigma-Aldrich

CAS-No. : 17354-14-2

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

### 2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms : Solvent Blue 35

Formula : $C_{22}H_{26}N_2O_2$
Molecular weight : 350.45 g/mol
CAS-No. : 17354-14-2
EC-No. : 241-379-4

No components need to be disclosed according to the applicable regulations.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact**
Wash off with soap and plenty of water.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
No data available

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Avoid dust formation. Avoid breathing vapours, mist or gas.
For personal protection see section 8.

**6.2 Environmental precautions**
No special environmental precautions required.

**6.3 Methods and materials for containment and cleaning up**
Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.
Storage class (TRGS 510): Non Combustible Solids

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Appropriate engineering controls**
General industrial hygiene practice.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
No special environmental precautions required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: powder<br>Colour: dark violet |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing | Melting point/range: 120 - 122 °C (248 - 252 °F) |

| | | |
|---|---|---|
| | point | |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
No data available

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**
No data available

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

No data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
Not dangerous goods

**IMDG**
Not dangerous goods

**IATA**
Not dangerous goods

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
No SARA Hazards

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,4-Bis(butylamino)anthraquinone | 17354-14-2 | 1989-08-11 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| 1,4-Bis(butylamino)anthraquinone | 17354-14-2 | 1989-08-11 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.10 Revision Date: 04/22/2016 Print Date: 05/01/2016

# SAFETY DATA SHEET

**Creation Date** 08-Nov-2010 **Revision Date** 18-Jun-2015 **Revision Number** 2

## 1. Identification

**Product Name** **Fluoranthene**

**Cat No. :** **AC119170000; AC119170250; AC119171000; AC119175000**

**Synonyms** Benzo[j,k]fluorene

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Entity / Business Name**
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number**
For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Acute oral toxicity | Category 4 |

**Label Elements**

**Signal Word**
Warning

**Hazard Statements**
Harmful if swallowed



**Precautionary Statements**
**Prevention**
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
**Ingestion**
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Very toxic to aquatic life with long lasting effects

## 3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Fluoranthene | 206-44-0 | >95 |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

**Ingestion** Do not induce vomiting. Get medical attention.

**Most important symptoms/effects** No information available.

**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Water spray. Carbon dioxide ($CO_2$). Dry chemical. alcohol-resistant foam.

**Unsuitable Extinguishing Media** No information available

**Flash Point** 100 °C / 212 °F

**Method -** No information available

**Autoignition Temperature** No information available

**Explosion Limits**

**Upper** No data available

**Lower** No data available

**Sensitivity to Mechanical Impact** No information available

**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**

Carbon monoxide (CO) Carbon dioxide ($CO_2$)

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 2 | 0 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment.

**Environmental Precautions** See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean Up** Sweep up or vacuum up spillage and collect in suitable container for disposal.

## 7. Handling and storage

**Handling** Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Avoid dust formation.

**Storage** Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

## 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Powder Solid |
| **Appearance** | Light green |
| **Odor** | Odorless |
| **Odor Threshold** | No information available |
| **pH** | No information available |
| **Melting Point/Range** | 109 - 111 °C / 228.2 - 231.8 °F |
| **Boiling Point/Range** | 384 - 34 °C / 723.2 - 93.2 °F |
| **Flash Point** | 100 °C / 212 °F |
| **Evaporation Rate** | No information available |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | No information available |
| **Vapor Density** | No information available |
| **Relative Density** | No information available |
| **Solubility** | No information available |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | No information available |
| **Decomposition Temperature** | No information available |
| **Viscosity** | No information available |
| **Molecular Formula** | C16 H10 |
| **Molecular Weight** | 202.25 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products.

**Incompatible Materials** Strong oxidizing agents

**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide ($CO_2$)

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information** No acute toxicity information is available for this product

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Fluoranthene | 2 g/kg ( Rat ) | 3180 mg/kg ( Rabbit ) | Not listed |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Fluoranthene | 206-44-0 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

## 12. Ecological information

**Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|
| Fluoranthene | Not listed | Oncorhynchus mykiss: LC50=0.0077 mg/L 96h | Not listed | EC50: 0.78 mg/L 20h |

**Persistence and Degradability** No information available
**Bioaccumulation/ Accumulation** No information available.

**Mobility** .

| Component | log Pow |
|---|---|
| Fluoranthene | 5.33 |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| Component | RCRA - U Series Wastes | RCRA - P Series Wastes |
|---|---|---|
| Fluoranthene - 206-44-0 | U120 | - |

## 14. Transport information

**DOT**
- **UN-No** UN3077
- **Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S.
- **Proper technical name** (Fluoranthene)
- **Hazard Class** 9
- **Packing Group** III

**TDG**
- **UN-No** UN3077
- **Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S.
- **Hazard Class** 9
- **Packing Group** III

**IATA**
- **UN-No** UN3077
- **Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s
- **Hazard Class** 9
- **Packing Group** III

**IMDG/IMO**
- **UN-No** UN3077
- **Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s
- **Hazard Class** 9
- **Packing Group** III

## 15. Regulatory information

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluoranthene | X | - | X | 205-912-4 | - | | - | X | X | X | - |

**Legend:**
**X - Listed**
**E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.**
**F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.**
**N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.**
**P - Indicates a commenced PMN substance**
**R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.**
**S - Indicates a substance that is identified in a proposed or final Significant New Use Rule**
**T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.**
**XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).**

**Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.**
**Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.**

## U.S. Federal Regulations

**TSCA 12(b)** Not applicable

**SARA 313**

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---|---|---|---|
| Fluoranthene | 206-44-0 | >95 | 1.0 0.1 |

**SARA 311/312 Hazardous Categorization**

| | |
|---|---|
| **Acute Health Hazard** | Yes |
| **Chronic Health Hazard** | No |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**Clean Water Act**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Fluoranthene | - | - | X | X |

**Clean Air Act** Not applicable

**OSHA** Occupational Safety and Health Administration
Not applicable

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Fluoranthene | 100 lb | - |

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Fluoranthene | X | X | X | - | - |

**U.S. Department of Transportation**

| | |
|---|---|
| Reportable Quantity (RQ): | N |
| DOT Marine Pollutant | N |
| DOT Severe Marine Pollutant | N |

**U.S. Department of Homeland Security**
This product does not contain any DHS chemicals.

## Other International Regulations

**Mexico - Grade** No information available

**Canada**
**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

**WHMIS Hazard Class** D1B Toxic materials



## 16. Other information

| | |
|---|---|
| **Prepared By** | Regulatory Affairs<br>Thermo Fisher Scientific<br>Email: EMSDS.RA@thermofisher.com |
| **Creation Date** | 08-Nov-2010 |
| **Revision Date** | 18-Jun-2015 |
| **Print Date** | 18-Jun-2015 |
| **Revision Summary** | This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) |

**Disclaimer**

**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of SDS**

# SAFETY DATA SHEET

**Revision Date** 10-Feb-2015 **Revision Number** 1

## 1. Identification

**Product Name** **Fluorene**

**Cat No. :** **AC156130000; AC156130250; AC156131000; AC156135000**

**Synonyms** Diphenylenemethane

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Entity / Business Name**
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number**
For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**
Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Label Elements**
None required

**Hazards not otherwise classified (HNOC)**
Very toxic to aquatic life with long lasting effects
May form combustible dust concentrations in air

## 3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Fluorene | 86-73-7 | 98 |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Obtain medical attention.

**Inhalation** Remove from exposure, lie down. Move to fresh air. Obtain medical attention.

**Ingestion** Clean mouth with water. Get medical attention.

**Most important symptoms/effects** No information available.
**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Water spray. Carbon dioxide ($CO_2$). Dry chemical. chemical foam.

**Unsuitable Extinguishing Media** No information available

**Flash Point** 151 °C / 303.8 °F
**Method -** No information available

**Autoignition Temperature** Not applicable
**Explosion Limits**
**Upper** No data available
**Lower** No data available
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Dust can form an explosive mixture in air. Do not allow run-off from fire fighting to enter drains or water courses.

**Hazardous Combustion Products**
None known
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 0 | 1 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment.
**Environmental Precautions** Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**Methods for Containment and Clean Up** Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

## 7. Handling and storage

**Handling** Avoid contact with skin and eyes. Do not breathe dust. Do not ingest.

**Storage** Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

## 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

| | |
|---|---|
| **Eye/face Protection** | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. |
| **Skin and body protection** | Wear appropriate protective gloves and clothing to prevent skin exposure. |
| **Respiratory Protection** | No protective equipment is needed under normal use conditions. |
| **Hygiene Measures** | Handle in accordance with good industrial hygiene and safety practice. |

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Powder Solid |
| **Appearance** | Beige |
| **Odor** | Odorless |
| **Odor Threshold** | No information available |
| **pH** | No information available |
| **Melting Point/Range** | 112 - 116 °C / 233.6 - 240.8 °F |
| **Boiling Point/Range** | 298 °C / 568.4 °F @ 760 mmHg |
| **Flash Point** | 151 °C / 303.8 °F |
| **Evaporation Rate** | Not applicable |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | 13 hPa @ 146 °C |
| **Vapor Density** | Not applicable |
| **Relative Density** | 1.200 |
| **Solubility** | No information available |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | Not applicable |
| **Decomposition Temperature** | No information available |
| **Viscosity** | Not applicable |
| **Molecular Formula** | C13 H10 |
| **Molecular Weight** | 166.22 |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactive Hazard** | None known, based on information available |
| **Stability** | Stable under normal conditions. |
| **Conditions to Avoid** | Incompatible products. |
| **Incompatible Materials** | Strong oxidizing agents |
| **Hazardous Decomposition Products** | None under normal use conditions |
| **Hazardous Polymerization** | No information available. |
| **Hazardous Reactions** | None under normal processing. |

## 11. Toxicological information

**Acute Toxicity**

| | |
|---|---|
| **Product Information** | No acute toxicity information is available for this product |
| **Component Information** | |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Fluorene | 86-73-7 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known
**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

## 12. Ecological information

**Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

**Persistence and Degradability** Insoluble in water May persist
**Bioaccumulation/ Accumulation** No information available.

**Mobility** . Is not likely mobile in the environment due its low water solubility.

| Component | log Pow |
|---|---|
| Fluorene | 4.18 |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT** Not regulated
**TDG** Not regulated
**IATA**
- **UN-No** 3077
- **Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.*
- **Hazard Class** 9
- **Packing Group** III

**IMDG/IMO**

| | |
|---|---|
| **UN-No** | 3077 |
| **Proper Shipping Name** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. |
| **Hazard Class** | 9 |
| **Packing Group** | III |

## 15. Regulatory information

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Fluorene | X | X | - | 201-695-5 | - | | X | X | X | X | - |

**Legend:**
**X - Listed**
**E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.**
**F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.**
**N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.**
**P - Indicates a commenced PMN substance**
**R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.**
**S - Indicates a substance that is identified in a proposed or final Significant New Use Rule**
**T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.**
**XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).**
**Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.**
**Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.**

**U.S. Federal Regulations**

**TSCA 12(b)** Not applicable

**SARA 313** Not applicable

**SARA 311/312 Hazardous Categorization**

| | |
|---|---|
| **Acute Health Hazard** | No |
| **Chronic Health Hazard** | No |
| **Fire Hazard** | Yes |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**Clean Water Act**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Fluorene | - | - | X | X |

**Clean Air Act** Not applicable

**OSHA** Occupational Safety and Health Administration
Not applicable

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Fluorene | 5000 lb | - |

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Fluorene | X | X | X | - | - |

**U.S. Department of Transportation**

| | |
|---|---|
| Reportable Quantity (RQ): | N |
| DOT Marine Pollutant | N |
| DOT Severe Marine Pollutant | N |

**U.S. Department of Homeland Security**
This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Canada**
**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

**WHMIS Hazard Class** B4 Flammable solid



## 16. Other information

**Prepared By**
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Revision Date** 10-Feb-2015
**Print Date** 10-Feb-2015
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Disclaimer**
**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of SDS**

# Safety Data Sheet

**Material Name: Fuel Oil No. 2**

**SDS No. 0088**
**EU/CLP GHS**

**Synonyms:** #2 Heating Oil; 2 Oil; Off-road Diesel Fuel

## * * * Section 1 - Product and Company Identification * * *

### Manufacturer Information

Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095-0961

Phone: 732-750-6000 Corporate EHS
Emergency # 800-424-9300 CHEMTREC
www.hess.com (Environment, Health, Safety Internet Website)

## * * * Section 2 - Hazards Identification * * *

### GHS Classification:

Flammable Liquids - Category 3
Acute Toxicity, Inhalation - Category 4
Skin Corrosion/Irritation – Category 2
Eye Damage/Irritation – Category 2
Carcinogenicity - Category 2
Specific Target Organ Toxicity (Single Exposure) – Category 3 (respiratory irritation, narcosis)
Aspiration Hazard – Category 1
Hazardous to the Aquatic Environment, Acute Hazard – Category 3

### GHS LABEL ELEMENTS

### Symbol(s)



### Signal Word

DANGER

### Hazard Statements

Flammable liquid and vapor.
Harmful if inhaled.
Causes skin irritation.
Causes eye irritation.
Suspected of causing cancer.
Suspected of causing genetic defects.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May be fatal if swallowed and enters airways.
Harmful to aquatic life.

## Precautionary Statements

**Prevention**

Keep away from heat/sparks/open flames/hot surfaces. No smoking
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid breathing fume/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Wash hands and forearms thoroughly after handling.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid release to the environment.

**Response**

In case of fire: Use water spray, fog or foam.
If on skin (or hair): Wash with plenty of soap and water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs, get medical advice/attention.
If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
If exposed or concerned: Get medical advice/attention.
If swallowed: Immediately all a poison center or doctor/physician if you feel unwell. Do NOT induce vomiting.

**Storage**

Store in a well ventilated place.
Keep cool. Keep container tightly closed.
Store locked up.

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations.

## * * * Section 3 - Composition / Information on Ingredients * * *

| CAS # | Component | Percent |
|---|---|---|
| 68476-30-2 | Fuel oil No. 2 | 100 |
| 91-20-3 | Naphthalene | <0.1 |

A complex combination of hydrocarbons with carbon numbers in the range C9 and higher produced from the distillation of petroleum crude oil.

## * * * Section 4 - First Aid Measures * * *

### First Aid: Eyes

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

### First Aid: Skin

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops.

### First Aid: Ingestion

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

### First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

## * * * Section 5 - Fire Fighting Measures * * *

### General Fire Hazards

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

### Hazardous Combustion Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

### Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, or gaseous extinguishing agent.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

### Unsuitable Extinguishing Media

None

### Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

## * * * Section 6 - Accidental Release Measures * * *

### Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

### Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal.

### Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

### Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

### Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

### Prevention of Secondary Hazards

None

## * * * Section 7 - Handling and Storage * * *

### Handling Procedures

Handle as a combustible liquid. Keep away from heat, sparks, excessive temperatures and open flame! No smoking or open flame in storage, use or handling areas. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when this product is loaded into tanks previously containing low flash point products (such as gasoline) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

### Storage Procedures

Keep containers closed and clearly labeled. Use approved vented storage containers. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks."

### Incompatibilities

Keep away from strong oxidizers; Fluorel ®

## * * * Section 8 - Exposure Controls / Personal Protection * * *

### Component Exposure Limits

**Fuel oil No. 2 (270-671-4)**

ACGIH: 100 mg/m3 TWA (inhalable fraction and vapor, as total hydrocarbons, listed under Diesel fuel)
Skin - potential significant contribution to overall exposure by the cutaneous route (listed under Diesel fuel)

Belgium: 100 mg/m3 TWA (as total hydrocarbon, aerosol and vapor)
Skin (listed under Gas oil)

Portugal: 100 mg/m3 TWA [VLE-MP] (aerosol and vapor, as total Hydrocarbons, listed under Fuel diesel)

**Naphthalene (202-049-5)**

ACGIH: 15 ppm STEL
10 ppm TWA
Skin - potential significant contribution to overall exposure by the cutaneous route

Austria: 10 ppm TWA [TMW]; 50 mg/m3 TWA [TMW]
skin notation

Belgium: 15 ppm STEL; 80 mg/m3 STEL
10 ppm TWA; 53 mg/m3 TWA
Skin

Denmark: 10 ppm TWA; 50 mg/m3 TWA

Finland: 2 ppm STEL; 10 mg/m3 STEL
1 ppm TWA; 5 mg/m3 TWA

France: 10 ppm TWA [VME]; 50 mg/m3 TWA [VME]

Germany: 0.1 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when MAK and BAT values are observed, inhalable fraction, exposure factor 1); 0.5 mg/m3 TWA AGW (The risk of damage to the embryo or fetus can be excluded when MAK and BAT values are observed, inhalable fraction, exposure factor 1)

Greece: 10 ppm TWA; 50 mg/m3 TWA

Ireland: 15 ppm STEL; 75 mg/m3 STEL
10 ppm TWA; 50 mg/m3 TWA

Netherlands: 80 mg/m3 STEL
50 mg/m3 TWA

Portugal: 10 ppm TWA [VLE-MP]

Spain: 15 ppm STEL [VLA-EC]; 80 mg/m3 STEL [VLA-EC]
10 ppm TWA [VLA-ED]; 53 mg/m3 TWA [VLA-ED]
skin - potential for cutaneous exposure

Sweden: 10 ppm LLV; 50 mg/m3 LLV
15 ppm STV; 80 mg/m3 STV

### Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

### Personal Protective Equipment: Respiratory

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

### Personal Protective Equipment: Hands

Gloves constructed of nitrile, neoprene, or PVC are recommended.

### Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

### Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

## * * * Section 9 - Physical & Chemical Properties * * *

| | | | |
|---|---|---|---|
| **Appearance:** | Red or reddish/orange colored (dyed) | **Odor:** | Mild, petroleum distillate odor |
| **Physical State:** | Liquid | **pH:** | ND |
| **Vapor Pressure:** | 0.009 psia @ 70 °F (21 °C) | **Vapor Density:** | >1.0 |
| **Boiling Point:** | 340 to 700 °F (171 to 371 °C) | **Melting Point:** | ND |
| **Solubility (H2O):** | Negligible | **Specific Gravity:** | AP 0.823-0871 |
| **Evaporation Rate:** | Slow; varies with conditions | **VOC:** | ND |
| **Octanol/H2O Coeff.:** | ND | **Flash Point:** | 100 °F (38 °C) minimum |
| **Flash Point Method:** | PMCC | **Upper Flammability Limit (UFL):** | 7.5 |
| **Lower Flammability Limit (LFL):** | 0.6 | **Burning Rate:** | ND |
| **Auto Ignition:** | 494°F (257°C) | | |

## * * * Section 10 - Chemical Stability & Reactivity Information * * *

### Chemical Stability

This is a stable material.

### Hazardous Reaction Potential

Will not occur.

### Conditions to Avoid

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

### Incompatible Products

Keep away from strong oxidizers; Fluorel ®

### Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

## * * * Section 11 - Toxicological Information * * *

### Acute Toxicity

#### A: General Product Information

Harmful if swallowed.

### B: Component Analysis - LD50/LC50

**Fuel oil No. 2 (68476-30-2)**

Oral LD50 Rat 12 g/kg; Dermal LD50 Rabbit 4720 µL/kg; Dermal LD50 Rabbit >2000 mg/kg; Inhalation LC50 Rat 4.6 mg/L 4 h

**Naphthalene (91-20-3)**

Inhalation LC50 Rat >340 mg/m3 1 h; Oral LD50 Rat 490 mg/kg; Dermal LD50 Rat >2500 mg/kg; Dermal LD50 Rabbit >20 g/kg

**Product Mixture**

Oral LD50 Rat 14.5 ml/kg; Dermal LD50 Rabbit >5 mL/kg; Guinea Pig Sensitization: negative; Primary dermal irritation: moderately irritating (Draize mean irritation score - 3.98 rabbits); Draize eye irritation: mildly irritating (Draize score, 48 hours, unwashed - 2.0 rabbits)

## Potential Health Effects: Skin Corrosion Property/Stimulativeness

Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

## Potential Health Effects: Eye Critical Damage/ Stimulativeness

Contact with eyes may cause mild irritation.

## Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

## Potential Health Effects: Inhalation

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

## Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

## Generative Cell Mutagenicity

This product is not reported to have any mutagenic effects. Material of similar composition has been positive in a mutagenicity study.

## Carcinogenicity

### A: General Product Information

Suspected of causing cancer.

Dermal carcinogenicity: positive - mice

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

This product is similar to Diesel Fuel. IARC classifies whole diesel fuel exhaust particulates as probably carcinogenic to humans (Group 2A) and NIOSH regards it as a potential cause of occupational lung cancer based on animal studies and limited evidence in humans.

### B: Component Carcinogenicity

**Fuel oil No. 2 (68476-30-2)**

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Diesel fuel)

**Naphthalene (91-20-3)**

ACGIH: A4 - Not Classifiable as a Human Carcinogen
NTP: Reasonably Anticipated To Be A Human Carcinogen (Possible Select Carcinogen)
IARC: Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))

## Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

## Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ general toxicity single exposure effects.

## Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any specific target organ general toxicity repeat exposure effects.

## Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

# * * * Section 12 - Ecological Information * * *

## Ecotoxicity

### A: General Product Information

Very toxic to aquatic life with long lasting effects. Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

### B: Component Analysis - Ecotoxicity - Aquatic Toxicity

**Fuel oil No. 2 (68476-30-2)**

| Test & Species | | Conditions |
|---|---|---|
| 96 Hr LC50 Pimephales promelas | 35 mg/L [flow-through] | |

**Naphthalene (91-20-3)**

| Test & Species | | Conditions |
|---|---|---|
| 96 Hr LC50 Pimephales promelas | 5.74-6.44 mg/L [flow-through] | |
| 96 Hr LC50 Oncorhynchus mykiss | 1.6 mg/L [flow-through] | |

| | |
|---|---|
| 96 Hr LC50 Oncorhynchus mykiss | 0.91-2.82 mg/L [static] |
| 96 Hr LC50 Pimephales promelas | 1.99 mg/L [static] |
| 96 Hr LC50 Lepomis macrochirus | 31.0265 mg/L [static] |
| 72 Hr EC50 Skeletonema costatum | 0.4 mg/L |
| 48 Hr LC50 Daphnia magna | 2.16 mg/L |
| 48 Hr EC50 Daphnia magna | 1.96 mg/L [Flow through] |
| 48 Hr EC50 Daphnia magna | 1.09 - 3.4 mg/L [Static] |

### Persistence/Degradability
No information available.

### Bioaccumulation
No information available.

### Mobility in Soil
No information available.

## * * * Section 13 - Disposal Considerations * * *

### Waste Disposal Instructions
See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

### Disposal of Contaminated Containers or Packaging
Dispose of contents/container in accordance with local/regional/national/international regulations.

## * * * Section 14 - Transportation Information * * *

### IATA Information
**Shipping Name:** Heating oil, light
**UN #:** 1202 **Hazard Class:** 3 **Packing Group:** III

### ICAO Information
**Shipping Name:** Heating oil, light
**UN #:** 1202 **Hazard Class:** 3 **Packing Group:** III

### IMDG Information
**Shipping Name:** Heating oil, light
**UN #:** 1202 **Hazard Class:** 3 **Packing Group:** III

## * * * Section 15 - Regulatory Information * * *

### Regulatory Information

#### Component Analysis – Inventory

| Component/CAS | EC # | EEC | CAN | TSCA |
|---|---|---|---|---|
| Fuel oil No. 2<br>68476-30-2 | 270-671-4 | EINECS | DSL | Yes |
| Naphthalene<br>91-20-3 | 202-049-5 | EINECS | DSL | Yes |

## * * * Section 16 - Other Information * * *

### Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

### Literature References

None

### Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet

# Safety Data Sheet - Version 5.0

**Preparation Date** 9/15/2015
**Latest Revision Date (If Revised)**
**SDS Expiry Date** 9/13/2018

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product Identifier

**Chemical Name** γ-Chlordane

**Catalogue #** C327040

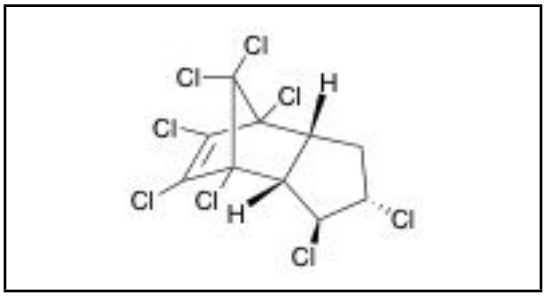
### 1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

**Product Uses** To be used only for scientific research and development. Not for use in humans or animals.

### 1.3 Details of the Supplier of the Safety Data Sheet

**Company** Toronto Research Chemicals
2 Brisbane Road
Toronto, ON M3J 2J8
CANADA

**Telephone** +14166659696
**FAX** +14166654439
**Email** orders@trc-canada.com




### 1.4 Emergency Telephone Number

**Emergency#** +14166659696 between 0800-1700 (GMT-5)

## 2. HAZARDS IDENTIFICATION

**WHMIS Classification (Canada)**

D2A Very Toxic Material Causing Other Toxic Effects
Carcinogen

**WHMIS Symbols (Canada)**



### 2.1/2.2 Classification of the Substance or Mixture and Label Elements

**GHS Hazards Classification (According to EU Regulation 1272/2008 and US OSHA 1910.1200)**

Acute Toxicity, Oral (Category 4)
Carcinogenicity (Category 2)
Hazardous to the Aquatic Environment, Acute Hazard (Category 1)

**EU Classification (According to EU Regulation 67/548/EEC)**

Harmful if swallowed. May cause cancer. Very toxic to aquatic organisms.

**EU Risk and Safety Statements (According to EU Regulation 67/548/EEC)**

| Hazard Statements | Hazard Codes |
|---|---|
| Harmful | Xn |
| Environmental Hazard | N |





**Risk Codes and Phrases**

| | |
|---|---|
| R22 | Harmful if swallowed. |
| R45 | May cause cancer. |
| R50 | Very toxic to aquatic organisms. |

**Safety Precaution Codes and Phrases**

| | |
|---|---|
| S61 | Avoid release to the environment. Refer to special instructions. |

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

**GHS Hazards Identification (According to EU Regulation 1272/2008 and US OSHA 1910.1200)**

**Signal Word** Warning



**GHS Hazard Statements**

| | |
|---|---|
| H302 | Harmful if swallowed. |
| H351 | Suspected of causing cancer. |
| H400 | Very toxic to aquatic life. |

**GHS Precautionary Statements**

| | |
|---|---|
| P273 | Avoid release to the environment. |
| P281 | Use personal protective equipment as required. |

### 2.3 Unclassified Hazards/Hazards Not Otherwise Classified

No data available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

**Molecular Formula:** $C_{10}H_6Cl_8$ **Molecular Weight:** 409.78

**CAS Registry #:** 5103-74-2 **EC#:** 225-826-0

**Synonyms**

(1R,2R,3aS,4S,7R,7aS)-rel-1,2,4,5,6,7,8,8-Octachloro-2,3,3a,4,7,7a-hexahydro-,4,7-methano-1H-indene; (1α,2β,3aα,4β,7β,7aα)-1,2,4,5,6,7,8,8-Octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene; 1β,2α,4α,5,6,7α,8,8-Octachloro-3aβ,4,7,7aβ-tetrahydro4,7-methanoindan; (±)-trans-Chlordane; trans-Chlordan; trans -1,2,4,5,6,7,8,8-Octachloro-3a,4,7,7a-tetrahydro-4,7-endo-methanoindan; trans-Chlordan; trans-Chlordane; β-Chlordan; β-Chlordane;

### 3.2 Mixtures

Not a mixture.

## 4. FIRST AID MEASURES

### 4.1 Description of First Aid Measures

**General Advice**

If medical attention is required, show this safety data sheet to the doctor.

**If Inhaled**

If inhaled, move person to fresh air. If not breathing, give artificial respiration and consult a physician.

**In Case of Skin Contact**

Wash affected area with soap and water. Consult a physician if any exposure symptoms are observed.

**In Case of Eye Contact**

Immediately rinse eyes with plenty of water for at least 15 minutes. Consult a physician.

**If Swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Do NOT induce vomiting unless advised to do so by a physician or Poison Control Center. Seek medical attention.

### 4.2 Most Important Symptoms and Effects, Both Acute and Delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

### 4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

No data available.

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing Media

**Conditions of flammability**
Not flammable or combustible.

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.2 Special Hazards Arising from the Substance or Mixture**
Carbon oxides, Hydrogen chloride

**5.3 Advice for Firefighters**
Wear self contained breathing apparatus for fire fighting if necessary.

**5.4 Further Information**
No data available.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Method and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe storage**
Keep container tightly closed in a dry and well-ventilated place.
Keep in a dry place.

Storage conditions: No Data Available

**7.3 Specific End Uses**
For scientific research and development only. Not for use in humans or animals.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control Parameters**
Contains no components with established occupational exposure limits.

**8.2 Exposure Controls**

**Appropriate Engineering Controls**
A laboratory fumehood or other appropriate form of local exhaust ventilation should be used to avoid exposure.

**Personal Protective Equipment**
All recommendations below are advisory in nature and a risk assessment should be performed by the employer/end user prior to use of this product. The type of protective equipment must be selected based on the amount and concentration of the dangerous material being used in the workplace.

**Eye/Face Protection**
Safety goggles or face shield. All equipment should have been tested and approved under appropriate standards, such as NIOSH (US), CSA (Canada), or EN 166 (EU).

**Skin Protection**
Gloves should be used when handling this material. Gloves are to be inspected prior to use. Contaminated gloves are to be removed using proper glove removal technique so that the outer surface of the glove does not contact bare skin. Dispose of contaminated gloves after use in compliance with good laboratory practices and local requirements.

Gloves used for incidental exposures (splash protection) should be designated as “chemical resistant” by EU standard EN 374 with the resistance codes corresponding to the anticipated use of the material. Unrated gloves are not recommended.
Suggested gloves: AnsellPro Sol-Vex nitrile gloves style 37-175, 15 mil thickness.
Penetration time has not been determined.

Gloves used for prolonged direct exposure (immersion) should be designated “chemical resistant” as per EN 734 with the resistance codes corresponding to the anticipated use of the material.
Suggested gloves: AnsellPro Viton/Butyl gloves style 38-612, 4/8 mil thickness.
Penetration time has not been determined.

These recommendations may not apply if the material is mixed with any other chemical, or dissolved into a solution. A risk assessment must be performed to ensure the gloves will still offer acceptable protection.

**Body Protection**
Fire resistant (Nomex) coveralls or chemical-resistant bodysuit (laminated Tychem SL or equivalent).

**Respiratory Protection**
Recommended respirators are NIOSH-approved N100 or CEN-approved FFP3 particulate respirators. These are to be only used as a backup to local exhaust ventilation or other engineering controls. If the respirator is the only means of protection, a full-face supplied air respirator must be used.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on Basic Physical and Chemical Properties

**A) Appearance**
No Data Available

**B) Odour**
odourless

**C) Odour Threshold**
No data available.

**D) pH**
No data available.

**E) Melting Point/Freezing Point**
No Data Available

**F) Initial Boiling Point/Boiling Range**
No data available.

**G) Flash point**
No data available.

**H) Evaporation Rate**
No data available.

**I) Flammability (Solid/Gas)**
No data available.

**J) Upper/Lower Flammability/Explosive Limits**
No data available.

**K) Vapour Pressure**
No data available.

**L) Vapour Density**
No data available.

**M) Relative Density**
1.590 g/cm3

**N) Solubility**
No Data Available

**O) Partition Coefficient: n-octanol/water**
No data available.

**P) Auto-Ignition Temperature**
No data available.

**Q) Decomposition Temperature**
No data available.

**R) Viscosity**
No data available.

**S) Explosive Properties**
No data available.

**T) Oxidizing Properties**
No data available.

### 9.2 Other Information
no data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity
No data available.

### 10.2 Chemical Stability
Stable under recommended storage conditions.

### 10.3 Possibility of Hazardous Reactions
No data available.

### 10.4 Conditions to Avoid
No data available.

### 10.5 Incompatible Materials

Strong oxidizing agents.

**10.6 Hazardous Decomposition Products**

**Other decomposition products:** No data available. In the event of fire: see section 5.

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on Toxicological Effects**

**A) Acute Toxicity**

**Oral LD50:** Mouse - 275 mg/kg

Rat - 1,100 mg/kg

**Inhalation LC50:** No data available.

**Dermal LD50:** No data available.

**B) Skin Corrosion/Irritation**

No data available

**C) Serious Eye Damage/Irritation**

No data available

**D) Respiratory or Skin Sensitization**

No data available

**E) Germ Cell Mutagenicity**

No data available

**F) Carcinogenicity**

Evidence of a carcinogenic effect.

This compound has been designated by the IARC as Group 2B: Possibly carcinogenic to humans.

**G) Reproductive Toxicity/Teratogenicity**

No data available

**H) Single Target Organ Toxicity - Single Exposure**

No data available

**I) Single Target Organ Toxicity - Repeated Exposure**

No data available

**J) Aspiration Hazard**

No data available

**K) Potential Health Effects and Routes of Exposure**

**Inhalation**

May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion**

Harmful if swallowed.

**Skin**

Harmful if absorbed through skin. May cause skin irritation.

**Eyes**

May cause eye irritation.

**L) Signs and Symptoms of Exposure**

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been thoroughly investigated.

**M) Additional Information**

RTECS: PC0365000

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**

**Toxicity to fish:**

LC50 - Lepomis macrochirus - 0.05 mg/l - 96 h

**12.2 Persistance and Degradability**

No data available.

**12.3 Bioaccumulative Potential**

No data available.

**12.4 Mobility in Soil**

No data available.

### 12.5 Results of PBT and vPvB Assessment

No data available.

### 12.6 Other Adverse Effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste Treatment Methods

**A) Product**

Product may be burned in an incinerator equipped with afterburner and scrubber. Excess and expired materials are to be offered to a licensed hazardous material disposal company. Ensure that all Federal and Local regulations regarding the disposal and destruction of this material are followed.

**B) Contaminated Packaging**

Dispose of as above.

**C) Other Considerations**

Product is not to be disposed of in sanitary sewers, storm sewers, or landfills.

## 14. TRANSPORT INFORMATION

### 14.1 UN Number

DOT (US): UN3077 IATA: UN3077 IMDG: UN3077 ADR/RID: UN3077

### 14.2 UN Proper Shipping Name

DOT (US)/IATA:
Environmentally hazardous substances, solid, n.o.s. (trans-Chlordane)
IMDG/ARD/RID:
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (trans-Chlordane)

### 14.3 Transport Hazard Class(es)

DOT (US): 9 IATA: 9 IMDG: 9 ADR/RID: 9

### 14.4 Packing Group

DOT (US): III IATA: III IMDG: III ADR/RID: III

### 14.5 Environmental Hazards

DOT (US): None IATA: None IMDG: Marine pollutant ADR/RID: None

### 14.6 Special Precautions for User

None

## 15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of WHMIS (Canada), OSHA 1910.1200 (US), and EU Regulation EC No. 1907/2006 (European Union).

### 15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

**A) Canada**

**DSL/NDSL Status:** This product is not listed on the Canadian DSL/NDSL.

**B) United States**

**TSCA Status:** This product is not listed on the US EPA TSCA.

**C) European Union**

**ECHA Status:** This product is not registered with the EU ECHA.

### 15.2 Chemical Safety Assessment

No data available

## 16. OTHER INFORMATION

### 16.1 Revision History

Original Publication Date: 9/15/2015

### 16.2 List of Abbreviations

| | |
|---|---|
| LD50 | Median lethal dose of a substance required to kill 50% of a test population. |
| LC50 | Medial lethal concentration of a substance required to kill 50% of a test population. |
| LDLo | Lowest known lethal dose |
| TDLo | Lowest known toxic dose |
| IARC | International Agency for Research on Cancer |
| NTP | National Toxicology Program |
| RTECS | Registry of Toxic Effects of Chemical Substances |

### 16.3 Further Information

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believed to be correct to the best of our knowledge, but is to be only used as a guide. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Please take all due care when handling this product.

# SAFETY DATA SHEET

**SDS ID NO.:** 0127MAR019
**Revision Date:** 06/01/2016

## 1. IDENTIFICATION

**Product Name:** Marathon Petroleum Gasoline - All Grades

**Synonym:** Gasoline; Regular Unleaded Gasoline; Conventional Regular Unleaded Gasoline; Mid Grade Unleaded Gasoline; Conventional Mid Grade Unleaded Gasoline; Premium Unleaded Gasoline; Conventional Premium Unleaded Gasoline; Sub-Octane Gasoline; Regular RBOB; Super RBOB; Premium RBOB; RBOB; Reformulated Blend Stock For Oxygenated Blending; 84 Octane Gasoline; CBOB; Premium CBOB; Conventional Blend Stock for Oxygenate Blending; Recreational Gasoline; Recreational Gasoline; Recreational Unleaded Gasoline; 89 Recreational Gasoline; Brand 89 Recreational Gasoline; 7.0 Max RVP 89 Recreational Gasoline; BR 7.0 Max RVP 89 Recreational Gasoline; 90 Recreational Gasoline; 90 Marina Gasoline; Brand 91 Recreational Gasoline; 91 Recreational Gasoline; 91 Marina Gasoline; 90 Octane Midgrade Gasoline with No Ethanol; 0125MAR019; 0126MAR019; 0134MAR019; 0313MAR019; 0314MAR019

**Chemical Family:** Complex Hydrocarbon Substance

**Recommended Use:** Fuel.
**Restrictions on Use:** All others.

**Manufacturer, Importer, or Responsible Party Name and Address:**

**MARATHON PETROLEUM COMPANY LP**
**539 South Main Street**
**Findlay, OH 45840**

**SDS information:** 1-419-421-3070

**Emergency Telephone:** 1-877-627-5463

## 2. HAZARD IDENTIFICATION

**Classification**

**OSHA Regulatory Status**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Flammable liquids | Category 1 |
| Skin corrosion/irritation | Category 2 |
| Germ cell mutagenicity | Category 1B |
| Carcinogenicity | Category 1B |
| Reproductive toxicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Aspiration toxicity | Category 1 |
| Acute aquatic toxicity | Category 2 |
| Chronic aquatic toxicity | Category 2 |

**Hazards Not Otherwise Classified (HNOC)**

Static accumulating flammable liquid

**Label elements**

**EMERGENCY OVERVIEW**

**Danger**

EXTREMELY FLAMMABLE LIQUID AND VAPOR
May accumulate electrostatic charge and ignite or explode
May be fatal if swallowed and enters airways
Causes skin irritation
May cause respiratory irritation
May cause drowsiness or dizziness
May cause genetic defects
May cause cancer
Suspected of damaging fertility or the unborn child
Toxic to aquatic life with long lasting effects



**Appearance** Clear yellow liquid **Physical State** Liquid **Odor** Hydrocarbon

**Precautionary Statements - Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools.
Take precautionary measures against static discharge
Avoid breathing mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection
Wash hands and any possibly exposed skin thoroughly after handling
Avoid release to the environment

**Precautionary Statements - Response**
IF exposed or concerned: Get medical attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation occurs: Get medical attention
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Do NOT induce vomiting
In case of fire: Use water spray, fog or regular foam for extinction
Collect spillage

**Precautionary Statements - Storage**
Store in a well-ventilated place. Keep container tightly closed
Keep cool
Store locked up

**Precautionary Statements - Disposal**
Dispose of contents/container at an approved waste disposal plant

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Gasoline is a complex combination of hydrocarbons consisting of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons having molecular chains ranging in length from four to ten carbons. May contain small amounts of dye and other additives (>0.02%) which are not considered hazardous at the concentrations used.

### Composition Information:

| Name | CAS Number | % Concentration |
|---|---|---|
| Gasoline | 86290-81-5 | 100 |
| Heptane (mixed isomers) | 142-82-5 | 2.5-26 |
| Pentane (mixed isomers) | 78-78-4 | 6.5-19 |
| Butane (mixed isomers) | 106-97-8 | 0.5-14 |
| Hexane Isomers (other than n-Hexane) | 107-83-5 | 2-12 |
| Toluene | 108-88-3 | 3-9.5 |
| Xylene (mixed isomers) | 1330-20-7 | 3.5-9.5 |
| n-Hexane | 110-54-3 | 0.1-4.5 |
| Cumene | 98-82-8 | 0-4 |
| 1,2,4 Trimethylbenzene | 95-63-6 | 1-4 |
| Ethylbenzene | 100-41-4 | 0.5-2.5 |
| Benzene | 71-43-2 | 0.1-1.5 |
| Cyclohexane | 110-82-7 | 0-1.5 |
| Octane | 111-65-9 | 0-1.5 |
| 1,2,3-trimethylbenzene | 526-73-8 | 0-1 |
| Naphthalene | 91-20-3 | 0.1-0.5 |

All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

## 4. FIRST AID MEASURES

**First Aid Measures**

**General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

**Inhalation:** Remove to fresh air. If not breathing, institute rescue breathing. If breathing is difficult, ensure airway is clear, give oxygen and continue to monitor. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). Keep affected person warm and at rest. If symptoms occur get medical attention.

**Skin Contact:** Immediately wash exposed skin with plenty of soap and water while removing contaminated clothing and shoes. May be absorbed through the skin in harmful amounts. Get medical attention if irritation persists. Any injection injury from high pressure equipment should be evaluated immediately by a physician as potentially serious (See NOTES TO PHYSICIAN).

Place contaminated clothing in closed container until cleaned or discarded. If clothing is to be laundered, inform the person performing the operation of contaminant's hazardous properties. Destroy contaminated, non-chemical resistant footwear.

**Eye Contact:** Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Gently remove contacts while flushing. Get medical attention if irritation persists.

**Ingestion:** Do not induce vomiting because of danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips, or if patient is lying down, turn body and head to side to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person. Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

**Most important signs and symptoms, both short-term and delayed with overexposure**

**Adverse Effects:** Irritating to the skin and mucous membranes. Symptoms may include redness, itching, and inflammation. May cause nausea, vomiting, diarrhea, and signs of nervous system depression: headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue. Aspiration hazard. May cause coughing, chest pains, shortness of breath, pulmonary edema and/or chemical pneumonitis. Repeated or prolonged skin contact may cause drying, reddening, itching and cracking.

**Indication of any immediate medical attention and special treatment needed**

**Notes To Physician:** INHALATION: This material (or a component) sensitizes the myocardium to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. Administration of sympathomimetic drugs should be avoided.

SKIN: Leaks or accidents involving high-pressure equipment may inject a stream of material through the skin and initially produce an injury that may not appear serious. Only a small puncture wound may appear on the skin surface but, without proper treatment and depending on the nature, original pressure, volume, and location of the injected material, can compromise blood supply to an affected body part. Prompt surgical debridement of the wound may be necessary to prevent irreversible loss of function and/or the affected body part. High pressure injection injuries may be SERIOUS SURGICAL EMERGENCIES.

INGESTION: This material represents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFF/ATC) can be used. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

**Unsuitable extinguishing media**
Do not use straight water streams to avoid spreading fire.

**Specific hazards arising from the chemical**
This product has been determined to be an extremely flammable liquid per the OSHA Hazard Communication Standard and should be handled accordingly. May accumulate electrostatic charge and ignite or explode. Vapors may travel along the ground or be moved by ventilation and ignited by many sources such as pilot lights, sparks, electric motors, static discharge, or other ignition sources at locations distant from material handling. Flashback can occur along vapor trail. For additional fire related information, see NFPA 30 or the Emergency Response Guidebook 128.

**Hazardous combustion products**
Smoke, carbon monoxide, and other products of incomplete combustion.

**Explosion data**
**Sensitivity to Mechanical Impact** No.
**Sensitivity to Static Discharge** Yes.

**Special protective equipment and precautions for firefighters**
Firefighters should wear full protective clothing and positive-pressure self-contained breathing apparatus (SCBA) with a full face-piece, as appropriate. Avoid using straight water streams. Water may be ineffective in extinguishing low flash point fires, but can be used to cool exposed surfaces. Avoid excessive water spray application. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Keep run-off water out of sewers and water sources.

**Additional firefighting tactics**
FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after the fire is out. Do not direct water at source of leak or safety devices; icing may occur. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles: if this is impossible, withdraw from area and let fire burn.

EVACUATION: Consider initial downwind evacuation for at least 1000 feet. If tank, rail car or tank truck is involved in a fire, ISOLATE for 5280 feet (1 mile) in all directions; also, consider initial evacuation of 5280 feet (1 mile) in all directions.

| **NFPA** | Health 1 | Flammability 3 | Instability 0 | Special Hazard - |
|---|---|---|---|---|

## 6. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| **Personal precautions:** | Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Eliminate all ignition sources. |
| **Protective equipment:** | Use personal protection measures as recommended in Section 8. |
| **Emergency procedures:** | Advise authorities and National Response Center (800-424-8802) if the product has entered a water course or sewer. Notify local health and pollution control agencies, if appropriate. |
| **Environmental precautions:** | Avoid release to the environment. Avoid subsoil penetration. Ethanol in gasoline phase seperates in contact with water. Monitor downstream for dissolved ethanol or other appropriate indicators. |
| **Methods and materials for containment:** | Contain liquid with sand or soil. Prevent spilled material from entering storm drains, sewers, and open waterways. |
| **Methods and materials for cleaning up:** | Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids. Recover and return free product to proper containers. When recovering free liquids ensure all equipment is grounded and bonded. Use only non-sparking tools. |

## 7. HANDLING AND STORAGE

**Safe Handling Precautions:**

NEVER SIPHON THIS PRODUCT BY MOUTH. Use appropriate grounding and bonding practices. Static accumulating flammable liquid. Bonding and grounding may be insufficient to eliminate the hazard from static electricity. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. Vapors may travel along the ground or be moved by ventilation. Flashback may occur along vapor trails. No smoking. Use only non-sparking tools. Avoid contact with skin, eyes and clothing. Avoid breathing fumes, gas, or vapors. Use only with adequate ventilation. Avoid repeated and prolonged skin contact. Use personal protection measures as recommended in Section 8. Exercise good personal hygiene including removal of soiled clothing and prompt washing with soap and water. Do not cut, drill, grind or weld on empty containers since explosive residues may remain. Refer to applicable EPA, OSHA, NFPA and consistent state and local requirements.

Hydrocarbons are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering, pumping at high flow rates or loading and transfer operations. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids. Sudden release of hot organic chemical vapors or mists from process equipment operating under elevated temperature and pressure, or sudden ingress of air into vacuum equipment may result in ignition of vapors or mists without the presence of obvious ignition sources. Nozzle spouts must be kept in contact with the containers or tank during the entire filling operation.

Portable containers should never be filled while in or on a motor vehicle or marine craft. Containers should be placed on the ground. Static electric discharge can ignite fuel vapors when filling non-grounded containers or vehicles on trailers. The nozzle spout must be kept in contact with the container before and during the entire filling operation. Use only approved containers.

A buildup of static electricity can occur upon re-entry into a vehicle during fueling especially in cold or dry climate conditions. The charge is generated by the action of dissimilar fabrics (i.e., clothing and upholstery) rubbing across each other as a person enters/exits the vehicle. A flash fire can result from this discharge if sufficient flammable vapors are present. Therefore, do not get back in your vehicle while refueling.

Cellular phones and other electronic devices may have the potential to emit electrical charges (sparks). Sparks in potentially explosive atmospheres (including fueling areas such as gas stations) could cause an explosion if sufficient flammable vapors are present. Therefore, turn off cellular phones and other electronic devices when working in potentially explosive atmospheres or keep devices inside your vehicle during refueling.

High-pressure injection of any material through the skin is a serious medical emergency even though the small entrance wound at the injection site may not initially appear serious. These injection injuries can occur from high-pressure equipment such as paint spray or grease or guns, fuel injectors, or pinhole leaks in hoses or hydraulic lines and should all be considered serious. High pressure injection injuries may be SERIOUS SURGICAL EMERGENCIES (See First Aid Section 4).

**Storage Conditions:**

Store in properly closed containers that are appropriately labeled and in a cool, well-ventilated area. Do not store near an open flame, heat or other sources of ignition.

**Incompatible Materials**

Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Name | ACGIH TLV | OSHA PELS: | OSHA - Vacated PELs | NIOSH IDLH |
|---|---|---|---|---|
| Gasoline<br>86290-81-5 | 300 ppm TWA<br>500 ppm STEL | - | 300 ppm TWA<br>900 mg/m$^3$ TWA<br>500 ppm STEL<br>1500 mg/m$^3$ STEL | - |

| | | | | |
|---|---|---|---|---|
| Heptane (mixed isomers)<br>142-82-5 | 400 ppm TWA<br>500 ppm STEL | TWA: 500 ppm<br>TWA: 2000 mg/m³ | 400 ppm TWA<br>1600 mg/m³ TWA<br>500 ppm STEL<br>2000 mg/m³ STEL | 750 ppm |
| Pentane (mixed isomers)<br>78-78-4 | 1000 ppm TWA | - | - | - |
| Butane (mixed isomers)<br>106-97-8 | 1000 ppm STEL | - | 800 ppm TWA<br>1900 mg/m³ TWA | - |
| Hexane Isomers (other than n-Hexane)<br>107-83-5 | 500 ppm TWA<br>1000 ppm STEL | - | 500 ppm TWA<br>1800 mg/m³ TWA<br>1000 ppm STEL<br>3600 mg/m³ STEL | - |
| Toluene<br>108-88-3 | 20 ppm TWA | TWA: 200 ppm<br>Ceiling: 300 ppm | 100 ppm TWA<br>375 mg/m³ TWA<br>150 ppm STEL<br>560 mg/m³ STEL | 500 ppm |
| Xylene (mixed isomers)<br>1330-20-7 | 100 ppm TWA<br>150 ppm STEL | TWA: 100 ppm<br>TWA: 435 mg/m³ | 100 ppm TWA<br>435 mg/m³ TWA<br>150 ppm STEL<br>655 mg/m³ STEL | 900 ppm |
| n-Hexane<br>110-54-3 | 50 ppm TWA<br>Skin - potential significant contribution to overall exposure by the cutaneous route | TWA: 500 ppm<br>TWA: 1800 mg/m³ | 50 ppm TWA<br>180 mg/m³ TWA | 1100 ppm |
| Cumene<br>98-82-8 | 50 ppm TWA | TWA: 50 ppm<br>TWA: 245 mg/m³<br>Skin | 50 ppm TWA<br>245 mg/m³ TWA<br>Limit applies to skin | 900 ppm |
| 1,2,4 Trimethylbenzene<br>95-63-6 | 25 ppm TWA | - | 25 ppm TWA<br>125 mg/m³ TWA | - |
| Ethylbenzene<br>100-41-4 | 20 ppm TWA | TWA: 100 ppm<br>TWA: 435 mg/m³ | 100 ppm TWA<br>435 mg/m³ TWA<br>125 ppm STEL<br>545 mg/m³ STEL | 800 ppm |
| Benzene<br>71-43-2 | 0.5 ppm TWA<br>2.5 ppm STEL<br>Skin - potential significant contribution to overall exposure by the cutaneous route | TWA: 10 ppm (applies to industry segments exempt from the benzene standard)<br>TWA: 1 ppm<br>STEL: 5 ppm<br>(see 29 CFR 1910.1028) | 25 ppm Ceiling<br>1 ppm TWA<br>5 ppm STEL | 500 ppm |
| Cyclohexane<br>110-82-7 | 100 ppm TWA | TWA: 300 ppm<br>TWA: 1050 mg/m³ | 300 ppm TWA<br>1050 mg/m³ TWA | 1300 ppm |
| Octane<br>111-65-9 | 300 ppm TWA | TWA: 500 ppm<br>TWA: 2350 mg/m³ | 300 ppm TWA<br>1450 mg/m³ TWA<br>375 ppm STEL<br>1800 mg/m³ STEL | 1000 ppm |
| 1,2,3-trimethylbenzene<br>526-73-8 | 25 ppm TWA | - | 25 ppm TWA<br>125 mg/m³ TWA | - |
| Naphthalene<br>91-20-3 | 10 ppm TWA<br>Skin - potential significant contribution to overall exposure by the cutaneous route | TWA: 10 ppm<br>TWA: 50 mg/m³ | 10 ppm TWA<br>50 mg/m³ TWA<br>15 ppm STEL<br>75 mg/m³ STEL | 250 ppm |

**Notes:** The manufacturer has voluntarily elected to provide exposure limits contained in OSHA's 1989 air contaminants standard in its SDSs, even though certain of those exposure limits were vacated in 1992.

**Engineering measures:** Local or general exhaust required in an enclosed area or when there is inadequate ventilation. Use mechanical ventilation equipment that is explosion-proof.

**Personal protective equipment**

**Eye protection:** Use goggles or face-shield if the potential for splashing exists.

**Skin and body protection:** Use nitrile rubber, Viton® or PVA gloves for repeated or prolonged skin exposure. Glove suitability is based on workplace conditions and usage. Contact the glove manufacturer for specific advice on glove selection and breakthrough times.

**Respiratory protection:** Use a NIOSH approved organic vapor chemical cartridge or supplied air respirators when there is the potential for airborne exposures to exceed permissible exposure limits or if excessive vapors are generated. Observe respirator assigned protection factors (APFs) criteria cited in federal OSHA 29 CFR 1910.134. Self-contained breathing apparatus should be used for fire fighting.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

| | |
|---|---|
| **Physical State** | Liquid |
| **Appearance** | Clear yellow liquid |
| **Color** | Yellow |
| **Odor** | Hydrocarbon |
| **Odor Threshold** | No data available. |

| **Property** | **Values (Method)** |
|---|---|
| **Melting Point / Freezing Point** | No data available. |
| **Initial Boiling Point / Boiling Range** | 24-210 °C / 75-410 °F (ASTM D86) |
| **Flash Point** | -43 °C / -45 °F |
| **Evaporation Rate** | No data available. |
| **Flammability (solid, gas)** | Not applicable. |
| **Flammability Limit in Air (%):** | |
| **Upper Flammability Limit:** | 7.6 |
| **Lower Flammability Limit:** | 1.4 |
| **Explosion limits:** | No data available. |
| **Vapor Pressure** | 5.5-15 psi (ASTM D4814) |
| **Vapor Density** | 3-4 |
| **Specific Gravity / Relative Density** | 0.70-0.76 |
| **Water Solubility** | No data available. |
| **Solubility in other solvents** | No data available. |
| **Partition Coefficient** | 2.13-4.5 |
| **Decomposition temperature** | No data available. |
| **pH:** | Not applicable |
| **Autoignition Temperature** | 280 °C / 536 °F |
| **Kinematic Viscosity** | No data available. |
| **Dynamic Viscosity** | No data available. |
| **Explosive Properties** | No data available. |
| **VOC Content (%)** | 100% |
| **Density** | No data available. |
| **Bulk Density** | Not applicable. |

## 10. STABILITY AND REACTIVITY

**Reactivity** The product is non-reactive under normal conditions.

**Chemical stability** The material is stable at 70°F, 760 mmHg pressure.

**Possibility of hazardous reactions** None under normal processing.

**Hazardous polymerization** Will not occur.

**Conditions to avoid** Excessive heat, sources of ignition, open flame.

**Incompatible Materials** Strong oxidizing agents.

**Hazardous decomposition products** None known under normal conditions of use.

## 11. TOXICOLOGICAL INFORMATION

**Potential short-term adverse effects from overexposures**

**Inhalation** May cause irritation of respiratory tract. May cause drowsiness or dizziness. Breathing high concentrations of this material in a confined space or by intentional abuse can cause irregular heartbeats which can cause death.

**Eye contact** Exposure to vapor or contact with liquid may cause mild eye irritation, including tearing, stinging, and redness.

**Skin contact** Causes skin irritation. Effects may become more serious with repeated or prolonged contact. May be absorbed through the skin in harmful amounts.

**Ingestion** May be fatal if swallowed or vomited and enters airways. May cause irritation of the mouth, throat and gastrointestinal tract.

**Acute toxicological data**

| Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Gasoline<br>86290-81-5 | 14000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 5.2 mg/L (Rat) 4 h |
| Heptane (mixed isomers)<br>142-82-5 | - | 3000 mg/kg (Rabbit) | 103 g/m³ (Rat) 4 h |
| Pentane (mixed isomers)<br>78-78-4 | - | - | 450 mg/L (Mouse) 2 h |
| Butane (mixed isomers)<br>106-97-8 | - | - | 658 mg/L (Rat) 4 h |
| Hexane Isomers (other than n-Hexane)<br>107-83-5 | > 5000 mg/kg (Rat) | - | - |
| Toluene<br>108-88-3 | > 2000 mg/kg (Rat) | 8390 mg/kg (Rabbit) | 12.5 mg/L (Rat) 4 h |
| Xylene (mixed isomers)<br>1330-20-7 | > 2000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 5.04 mg/L (Rat) 4 h |
| n-Hexane<br>110-54-3 | 15000 mg/kg (Rat) | 3000 mg/kg (Rabbit) | 48000 ppm (Rat) 4 h |
| Cumene<br>98-82-8 | > 2000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 20 mg/L (Rat) 6 h |
| 1,2,4 Trimethylbenzene<br>95-63-6 | 3280 mg/kg (Rat) | > 3160 mg/kg (Rabbit) | 18,000 mg/m³ (Rat) 4 h |
| Ethylbenzene<br>100-41-4 | > 2000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | 17.2 mg/L (Rat) 4 h |
| Benzene<br>71-43-2 | > 2000 mg/kg (Rat) | > 5000 mg/kg (Rabbit) | > 20 mg/l (Rat) 4 h |
| Cyclohexane<br>110-82-7 | > 5000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | 13.9 mg/L (Rat) 4 h |
| Octane<br>111-65-9 | - | - | 118 g/m³ (Rat) 4 h |
| 1,2,3-trimethylbenzene<br>526-73-8 | - | - | - |
| Naphthalene<br>91-20-3 | 490 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 340 mg/m³ (Rat) 1 h |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

NAPHTHAS: In a large epidemiological study on over 15,000 employees at several petroleum refineries and amongst residents located near these refineries, no increased risk of kidney cancer was observed in association with gasoline exposures (a similar material). In a similar study, no increased risk of kidney cancer was observed among petroleum refinery workers, but there was a slight trend in the incidence of kidney cancers among service station employees, especially after a 30-year latency period. Altered mental state, drowsiness, peripheral motor neuropathy, irreversible brain damage (so-called Petrol Sniffer's Encephalopathy), delirium, seizures, and sudden death have been reported from repeated overexposure to some hydrocarbon solvents, naphthas, and gasoline.

ISOPARAFFINS: Studies in laboratory animals have shown that long-term exposure to similar materials (isoparaffins) can cause kidney damage and kidney cancer in male laboratory rats. However, in-depth research indicates that these findings are unique to the male rat, and that these effects are not relevant to humans.

C9 AROMATIC HYDROCARBONS: A developmental inhalation study was conducted in laboratory mice. Increased implantation losses, reduced fetal weights, delayed ossification and an increased incidence of cleft palate were observed at the highest exposure level (1,500 ppm). This exposure level was extremely toxic to pregnant female mice (44% mortality). Reduced fetal body weights were also observed at 500 ppm. A multi-generation reproduction inhalation study was conducted in laboratory rats. Reductions in pup weights, pup weight gain, litter size, and pup survival were observed at 1,500 ppm, an exposure level at which significant maternal toxicity was observed. Reduced pup weight gain was also observed at 500 ppm.

PENTANES: Studies of pentane isomers in laboratory animals indicate exposure to extremely high levels (roughly 10 vol.%) may induce cardiac arrhythmias (irregular heartbeats) which may be serious or fatal.

BUTANES: Studies in laboratory animals indicate exposure to extremely high levels of butanes (1-10 or higher vol.% in air) may cause cardiac arrhythmias (irregular heartbeats) which may be serious or fatal.

TOLUENE: Case studies of persons abusing toluene suggest isolated incidences of adverse effects on the fetus including birth defects. Abuse of toluene at high concentrations (e.g., glue sniffing and solvent abuse) has been associated with adverse effects on the liver, kidney and nervous system, and can cause CNS depression, cardiac arrhythmias, and death. Studies of workers indicate longterm exposure may be related to impaired color vision and hearing. Some studies of workers suggest longterm exposure may be related to neurobehavioral and cognitive changes. Some of these effects have been observed in laboratory animals following repeated exposure to high levels of toluene. Several studies of workers suggest longterm exposure may be related to small increases in spontaneous abortions and changes in some gonadotropic hormones. However, the weight of evidence does not indicate toluene is a reproductive hazard to humans. Studies in laboratory animals indicate some changes in reproductive organs following high levels of exposure, but no significant effects on mating performance or reproduction were observed. Case studies of persons abusing toluene suggest isolated incidences of adverse effects on the fetus including birth defects. Findings in laboratory animals have been largely negative. Positive findings include small increases in minor skeletal and visceral malformations and developmental delays following very high levels of maternal exposure. Studies of workers indicate long-term exposure may be related to effects on the liver, kidney and blood, but these appear to be limited to changes in serum enzymes and decreased leukocyte counts. Adverse effects on the liver, kidney, thymus and nervous system were observed in animal studies following very high levels of exposure. The relevance of these findings to humans is not clear at this time.

XYLENES, ALL ISOMERS: Overexposure to xylene may cause upper respiratory tract irritation, headache, cyanosis, blood serum changes, nervous system damage and narcosis. Effects may be increased by the use of alcoholic beverages. Evidence of liver and kidney impairment were reported in workers recovering from a gross overexposure. Effects from Prolonged or Repeated Exposure: Impaired neurological function was reported

in workers exposed to solvents including xylene. Studies in laboratory animals have shown evidence of impaired hearing following high levels of exposure. Studies in laboratory animals suggest some changes in reproductive organs following high levels of exposure but no significant effects on reproduction were observed. Studies in laboratory animals indicate skeletal and visceral malformations, developmental delays, and increased fetal resorptions following extremely high levels of maternal exposure with evidence of maternal toxicity. The relevance of these observations to humans is not clear at this time. Adverse effects on the liver, kidney, bone marrow (changes in blood cell parameters) were observed in laboratory animals following high levels of exposure. The relevance of these observations to humans is not clear at this time.

1,2,4-TRIMETHYLBENZENE: The following information pertains to a mixture of C9 aromatic hydrocarbons, over 40% of which was composed of 1,2,4-trimethylbenzene. A developmental inhalation study was conducted in laboratory mice. Increased implantation losses, reduced fetal weights, delayed ossification and an increased incidence of cleft palate were observed at the highest exposure level (1,500 ppm). This exposure level was extremely toxic to pregnant female mice (44% mortality). Reduced fetal body weights were also observed at 500 ppm. A multi-generation reproduction inhalation study was conducted in laboratory rats. Reductions in pup weights, pup weight gain, litter size, and pup survival were observed at 1,500 ppm, an exposure level at which significant maternal toxicity was observed. Reduced pup weight gain was also observed at 500 ppm. Embryotoxicity has been reported in studies of laboratory animals. Adverse effects included increased implantation losses, reduced fetal weights, delayed ossification and an increased incidence of cleft palate.<n><n>

N-HEXANE: Long-term or repeated exposure to n-hexane can cause peripheral nerve damage. Initial symptoms are numbness of the fingers and toes. Also, motor weakness can occur in the digits, but may also involve muscles of the arms, thighs and forearms. The onset of these symptoms may be delayed for several months to a year after the beginning of exposure. Testicular atrophy and partial to full loss of the germ cell line were observed in sub-chronic high-dose inhalation studies of laboratory rodents. These effects appeared irreversible. Rodent reproduction studies have shown evidence of reduced fetal weight but no frank malformations.

CUMENE: Overexposure to cumene may cause upper respiratory tract irritation and CNS depression. Studies in laboratory animals indicate evidence of respiratory tract hyperplasia, and adverse effects on the liver, kidney and adrenal glands following high level exposure. The relevance of these findings to humans is not clear at this time. Findings from lifetime laboratory rodent inhalation studies were as follows: In F344/N rats: an increased incidence of renal carcinomas and adenomas, respiratory epithelial adenomas, and interstitial cell adenomas of the testes. In B6C3F1 mice: an increased incidence of carcinomas and adenomas of the bronchi and lung, liver neoplasms, hemangiosarcomas of the spleen, and adenomas of the thyroid.

ETHYLBENZENE: Findings from a 2-year inhalation study in rodents conducted by NTP were as follows: Effects were observed only at the highest exposure level (750 ppm). At this level the incidence of renal tumors was elevated in male rats (tubular carcinomas) and female rats (tubular adenomas). The incidence of tumors was also elevated in male mice (alveolar and bronchiolar carcinomas) and female mice (hepatocellular carcinomas). IARC has classified ethyl benzene as "possibly carcinogenic to humans" (Group 2B). Studies in laboratory animals indicate some evidence of post-implantation deaths following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate limited evidence of renal malformations, resorptions, and developmental delays following high levels of maternal exposure with evidence of maternal toxicity. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals have demonstrated evidence of ototoxicity (hearing loss) following exposure levels as low as 300 ppm for 5 days. Studies in laboratory animals indicate some evidence of adverse effects on the liver, kidney, thyroid, and pituitary gland.

BENZENE: Studies of workers exposed to benzene show clear evidence that overexposure can cause cancer and other diseases of the blood forming organs including Acute

Myelogenous Leukemia (AML), and Aplastic Anemia (AA), an often fatal disease. Some studies suggest overexposure to benzene may also be associated with Myelodysplastic Syndrome (MDS). Findings from a case control study of workers exposed to benzene was reported during the 2009 Benzene Symposium in Munich included an increase in Acute Myeloid Leukemias and Non-Hodgkins Lymphoid Neoplasms (NHLN) of the subtype follicular lymphoma (FL) in some occupational categories. Some studies of workers exposed to benzene have shown an association with increased rates of chromosome aberrations in circulating lymphocytes. One study of women workers exposed to benzene suggested a weak association with irregular menstruation. However, other studies of workers exposed to benzene have not demonstrated clear evidence of an effect on fertility or reproductive outcome in humans. Benzene can cross the placenta and affect the developing fetus. Cases of AA have been reported in the offspring of persons severely overexposed to benzene. Studies in laboratory animals indicate that prolonged, repeated exposure to high levels of benzene vapor can cause bone marrow suppression and cancer in multiple organ systems. Studies in laboratory animals show evidence of adverse effects on male reproductive organs following high levels of exposure but no significant effects on reproduction have been observed. Embryotoxicity has been reported in studies of laboratory animals but effects were limited to reduced fetal weight and minor skeletal variations. Benzene has been classified as a proven human carcinogen by OSHA and a Group 1 (Carcinogenic to Humans) material by IARC. The current proposed IARC classification for benzene is summarized as follows: Sufficient evidence for Acute Myeloid Leukemia; limited evidence for Acute Lymphatic Leukemia, Chronic Lymphatic Leukemia, Non-Hodgkin Lymphoma, and Multiple Myeloma.

NAPHTHALENE: Severe jaundice, neurotoxicity (kernicterus) and fatalities have been reported in young children and infants as a result of hemolytic anemia from overexposure to naphthalene. Persons with glucose 6-phosphate dehydrogenase (G6PD) deficiency are more prone to the hemolytic effects of naphthalene. Adverse effects on the kidney have been reported in persons overexposed to naphthalene but these effects are believed to be a consequence of hemolytic anemia, and not a direct effect. Hemolytic anemia has been observed in laboratory animals exposed to naphthalene. Laboratory rodents exposed to naphthalene vapor for 2 years (lifetime studies) developed non-neoplastic and neoplastic tumors and inflammatory lesions of the nasal and respiratory tract. Cataracts and other adverse effects on the eye have been observed in laboratory animals exposed to high levels of naphthalene. Findings from a large number of bacterial and mammalian cell mutation assays have been negative. A few studies have shown chromosomal effects (elevated levels of Sister Chromatid Exchange or chromosomal aberrations) in vitro. Naphthalene has been classified as Possibly Carcinogenic to Humans (2B) by IARC, based on findings from studies in laboratory animals.

CARBON MONOXIDE: is a chemical asphyxiant with no warning properties (such as odor). At 400-500 ppm for 1 hour headache and dyspnea may occur. If activity is increased, symptoms of overexposure may include nausea, irritability, increased respiration, tinnitus, sweating, chest pain, confusion, impaired judgement, dizziness, weakness, drowsiness, ataxia, irregular heart beat, cyanosis and pallor. Levels in excess of 1000 ppm can result in collapse, loss of conciousness, respiratory failure and death. Extremely high concentrations (12,800 ppm) can cause immediate unconsciousness and death in 1-3 minutes. Repeated anoxia can lead to central nervous system damage and peripheral neuropathy, with loss of sensation in the fingers, amnesia, and mental deterioration and possible congestive heart failure. Damage may also occur to the fetus, lung, liver, kidney, spleen, cardiovascular system and other organs.

WHOLLY-VAPORIZED UNLEADED GASOLINE: Lifetime exposure to wholly vaporized unleaded gasoline produced an increased incidence of liver tumors in female mice exposed to the highest exposure concentration (2056 ppm) and α-2 urinary globulin-mediated kidney tumors in male rats. No exposure-related tumors were observed in male mice or female rats. The male-specific rat kidney tumors are not considered relevant to human health. Mice receiving lifetime repeated skin application of various petroleum naphthas exhibited an irritation-dependent increased incidence of skin tumors. Additional studies suggest that these tumors occur through a mechanism that may not be relevant to human health. Epidemiological data from over 18,000 petroleum marketing and distribution workers

showed no increased risk of leukemia, multiple myeloma, or kidney cancer resulting from gasoline exposure. Unleaded gasoline has been identified as possibly carcinogenic to humans (2B) by the International Agency for Research on Cancer (IARC).

COMBUSTION ENGINE EXHAUST: Chronic inhalation studies of gasoline engine exhaust in mice, rats and hamsters did not produce any carcinogenic effects. Condensates/extracts of gasoline engine exhaust produced an increase in tumors compared to controls when testing by skin painting, subcutaneous injection, intratracheal instillation or implantation into the lungs. Gasoline exhaust has been classified as possibly carcinogenic to humans (2B) by the International Agency for Research on Cancer (IARC).

**Adverse effects related to the physical, chemical and toxicological characteristics**

**Signs and Symptoms** Irritating to the skin and mucous membranes. Symptoms may include redness, itching, and inflammation. May cause nausea, vomiting, diarrhea, and signs of nervous system depression: headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue. Aspiration hazard. May cause coughing, chest pains, shortness of breath, pulmonary edema and/or chemical pneumonitis. Repeated or prolonged skin contact may cause drying, reddening, itching and cracking.

**Sensitization** Not expected to be a skin or respiratory sensitizer.

**Mutagenic effects** May cause genetic defects.

**Carcinogenicity** May cause cancer.

Cancer designations are listed in the table below

| Name | ACGIH (Class) | IARC (Class) | NTP | OSHA |
|---|---|---|---|---|
| Gasoline 86290-81-5 | Confirmed animal carcinogen (A3) | Possible human carcinogen (2B) | Not Listed | Not Listed |
| Heptane (mixed isomers) 142-82-5 | Not Listed | Not Listed | Not Listed | Not Listed |
| Pentane (mixed isomers) 78-78-4 | Not Listed | Not Listed | Not Listed | Not Listed |
| Butane (mixed isomers) 106-97-8 | Not Listed | Not Listed | Not Listed | Not Listed |
| Hexane Isomers (other than n-Hexane) 107-83-5 | Not Listed | Not Listed | Not Listed | Not Listed |
| Toluene 108-88-3 | Not Classifiable (A4) | Not Classifiable (3) | Not Listed | Not Listed |
| Xylene (mixed isomers) 1330-20-7 | Not classifiable (A4) | Not classifiable (3) | Not Listed | Not Listed |
| n-Hexane 110-54-3 | Not Listed | Not Listed | Not Listed | Not Listed |
| Cumene 98-82-8 | Not listed | Possible human carcinogen (2B) | Reasonably anticipated to be a human carcinogen | Not listed |
| 1,2,4 Trimethylbenzene 95-63-6 | Not Listed | Not Listed | Not Listed | Not Listed |
| Ethylbenzene 100-41-4 | Confirmed animal carcinogen (A3) | Possible human carcinogen (2B) | Not Listed | Not Listed |
| Benzene 71-43-2 | Confirmed human carcinogen (A1) | Carcinogenic to humans (1) | Known to be human carcinogen | Known carcinogen |
| Cyclohexane 110-82-7 | Not Listed | Not Listed | Not Listed | Not Listed |
| Octane 111-65-9 | Not Listed | Not Listed | Not Listed | Not Listed |
| 1,2,3-trimethylbenzene 526-73-8 | Not Listed | Not Listed | Not Listed | Not Listed |
| Naphthalene 91-20-3 | Confirmed animal carcinogen (A3) | Possible human carcinogen (2B) | Reasonably anticipated to be a human carcinogen | Not Listed |

**Reproductive toxicity** Suspected of damaging fertility or the unborn child.

**Specific Target Organ Toxicity (STOT) - single exposure** Respiratory system. Central nervous system.

**Specific Target Organ Toxicity (STOT) - repeated exposure** Not classified.

**Aspiration hazard** May be fatal if swallowed or vomited and enters airways.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** This product should be considered toxic to aquatic organisms, with the potential to cause long lasting adverse effects in the aquatic environment.

| Name | Algae/aquatic plants | Fish | Toxicity to Microorganisms | Crustacea |
|---|---|---|---|---|
| Gasoline<br>86290-81-5 | 72-hr EC50 = 56 mg/l<br>Algae | 96-hr LC50 = 11 mg/l<br>Rainbow trout (static) | - | 48-hr LC50 = 7.6 mg/l<br>Daphnia magna |
| Heptane (mixed isomers)<br>142-82-5 | - | 96-hr LC50 = 375 mg/L<br>Tilapia | - | - |
| Pentane (mixed isomers)<br>78-78-4 | - | 96-hr LC50 = 3.1 mg/L<br>Rainbow trout | - | 48-hr EC50 = >1 - <10 mg/L<br>Daphnia magna |
| Butane (mixed isomers)<br>106-97-8 | - | - | - | - |
| Hexane Isomers (other than n-Hexane)<br>107-83-5 | - | - | - | - |
| Toluene<br>108-88-3 | 72-hr EC50 = 12.5 mg/l<br>Algae | 96-hr LC50 <= 10 mg/l<br>Rainbow trout | - | 48-hr EC50 = 5.46-9.83 mg/l<br>Daphnia magna<br>48-hr EC50 = 11.5 mg/l<br>Daphnia magna (Static) |
| Xylene (mixed isomers)<br>1330-20-7 | 72-hr EC50 = 11 mg/l<br>Algae | 96-hr LC50 = 8 mg/l<br>Rainbow trout | - | 48-hr LC50 = 3.82 mg/l<br>Daphnia magna |
| n-Hexane<br>110-54-3 | - | 96-hr LC50 = 2.5 mg/l<br>Fathead minnow | - | - |
| Cumene<br>98-82-8 | 72-hr EC50 = 2.6 mg/l<br>Algae | 96-hr LC50 = 6.04-6.61 mg/l<br>Fathead minnow<br>(Flow-through)<br>96-hr LC50 = 2.7 mg/l<br>Rainbow trout (semi-static) | - | 48-hr EC50 = 7.9-14.1 mg/l<br>Daphnia magna (static) |
| 1,2,4 Trimethylbenzene<br>95-63-6 | - | 96-hr LC50 = 7.19-8.28 mg/l<br>Fathead minnow<br>(flow-through) | - | 48-hr EC50 = 6.14 mg/L<br>Daphnia magna |
| Ethylbenzene<br>100-41-4 | 72-hr EC50 = 1.7-7.6 mg/l<br>Algae | 96-hr LC50 = 4 mg/L<br>Rainbow trout | - | 48-hr EC50 = 1-4 mg/L<br>Daphnia magna |
| Benzene<br>71-43-2 | 72-hr EC50 = 29 mg/l<br>Algae | 96-hr LC50 = 5.3 mg/l<br>Rainbow trout<br>(flow-through) | - | 48-hr EC50 = 8.76-15.6 mg/l<br>Daphnia magna (Static) |
| Cyclohexane<br>110-82-7 | 72-hr EC50 = 500 mg/l<br>Algae | 96-hr LC50 = 3.96-5.18 mg/l<br>Fathead minnow | - | 48-hr EC50 = 1.7-3.5 mg/L<br>Bay shrimp |
| Octane<br>111-65-9 | - | - | - | 48-hr LC50 = 0.38 mg/l<br>Daphnia magna |
| 1,2,3-trimethylbenzene<br>526-73-8 | - | 96-hr LC50 = 7.72 mg/l<br>Fathead Minnow<br>(flow-through) | - | - |
| Naphthalene<br>91-20-3 | - | 96-hr LC50 = 0.91-2.82 mg/l<br>Rainbow trout (static)<br>96-hr LC50 = 1.99 mg/l<br>Fathead minnow (static) | - | 48-hr LC50 = 1.6 mg/l<br>Daphnia magna |

**Persistence and degradability** Expected to be inherently biodegradable. The presence of ethanol in this product may impede the biodegradation of benzene, toluene, ethylbenzene and xylene in groundwater, resulting in elongated plumes of these constituents.

**Bioaccumulation** Has the potential to bioaccumulate.

**Mobility in soil** May partition into air, soil and water.

**Other adverse effects** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Description of Waste Residues**
This material may be a flammable liquid waste.

**Safe Handling of Wastes**
Handle in accordance with applicable local, state, and federal regulations. Use personal protection measures as required. Use appropriate grounding and bonding practices. Use only non-sparking tools. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. No smoking.

**Disposal of Wastes / Methods of Disposal**
The user is responsible for determining if any discarded material is a hazardous waste (40 CFR 262.11). Dispose of in accordance with federal, state and local regulations.

**Methods of Contaminated Packaging Disposal**
Empty containers should be completely drained and then discarded or recycled, if possible. Do not cut, drill, grind or weld on empty containers since explosive residues may be present. Dispose of in accordance with federal, state and local regulations.

## 14. TRANSPORT INFORMATION

**DOT (49 CFR 172.101):**

| | |
|---|---|
| **UN Proper Shipping Name:** | Gasoline |
| **UN/Identification No:** | UN 1203 |
| **Transport Hazard Class(es):** | 3 |
| **Packing Group:** | II |

**TDG (Canada):**

| | |
|---|---|
| **UN Proper Shipping Name:** | Gasoline |
| **UN/Identification No:** | UN 1203 |
| **Transport Hazard Class(es):** | 3 |
| **Packing Group:** | II |

## 15. REGULATORY INFORMATION

**US Federal Regulatory Information:**

US TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA Chemical Inventory.

**EPA Superfund Amendment & Reauthorization Act (SARA):**

**SARA Section 302:** This product does not contain any component(s) included on EPA's Extremely Hazardous Substance (EHS) List.

| Name | CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs |
|---|---|
| Gasoline | NA |
| Heptane (mixed isomers) | NA |
| Pentane (mixed isomers) | NA |
| Butane (mixed isomers) | NA |
| Hexane Isomers (other than n-Hexane) | NA |
| Toluene | NA |
| Xylene (mixed isomers) | NA |

| | |
|---|---|
| n-Hexane | NA |
| Cumene | NA |
| 1,2,4 Trimethylbenzene | NA |
| Ethylbenzene | NA |
| Benzene | NA |
| Cyclohexane | NA |
| Octane | NA |
| 1,2,3-trimethylbenzene | NA |
| Naphthalene | NA |

**SARA Section 304:** This product may contain component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

| Name | Hazardous Substances RQs |
|---|---|
| Gasoline | NA |
| Heptane (mixed isomers) | NA |
| Pentane (mixed isomers) | NA |
| Butane (mixed isomers) | NA |
| Hexane Isomers (other than n-Hexane) | NA |
| Toluene | 1000 lb final RQ<br>454 kg final RQ |
| Xylene (mixed isomers) | 100 lb final RQ<br>45.4 kg final RQ |
| n-Hexane | 5000 lb final RQ<br>2270 kg final RQ |
| Cumene | 5000 lb final RQ<br>2270 kg final RQ |
| 1,2,4 Trimethylbenzene | NA |
| Ethylbenzene | 1000 lb final RQ<br>454 kg final RQ |
| Benzene | 10 lb final RQ<br>4.54 kg final RQ |
| Cyclohexane | 1000 lb final RQ<br>454 kg final RQ |
| Octane | NA |
| 1,2,3-trimethylbenzene | NA |
| Naphthalene | 100 lb final RQ<br>45.4 kg final RQ |

**SARA:** The following EPA hazard categories apply to this product:

Acute Health Hazard
Chronic Health Hazard
Fire Hazard

**SARA Section 313:** This product may contain component(s), which if in exceedance of the de minimus threshold, may be subject to the reporting requirements of SARA Title III Section 313 Toxic Release Reporting (Form R).

| Name | CERCLA/SARA 313 Emission reporting: |
|---|---|
| Gasoline | None |
| Heptane (mixed isomers) | None |
| Pentane (mixed isomers) | None |
| Butane (mixed isomers) | None |
| Hexane Isomers (other than n-Hexane) | None |
| Toluene | 1.0 % de minimis concentration |
| Xylene (mixed isomers) | 1.0 % de minimis concentration |
| n-Hexane | 1.0 % de minimis concentration |
| Cumene | 1.0 % de minimis concentration |

| | |
|---|---|
| 1,2,4 Trimethylbenzene | 1.0 % de minimis concentration |
| Ethylbenzene | 0.1 % de minimis concentration |
| Benzene | 0.1 % de minimis concentration |
| Cyclohexane | 1.0 % de minimis concentration |
| Octane | None |
| 1,2,3-trimethylbenzene | None |
| Naphthalene | 0.1 % de minimis concentration |

**State and Community Right-To-Know Regulations:**
The following component(s) of this material are identified on the regulatory lists below:

Gasoline

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 0957 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Carcinogen; Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 0957 TPQ: 10000 lb (Under N.J.A.C. 7:1G, environmental hazardous substances in mixtures such as gasoline or new and used petroleum oil may be reported under these categories) |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Heptane (mixed isomers)

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1339 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants: | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Pentane (mixed isomers)

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1064 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |

| | |
|---|---|
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - fourth degree |
| New Jersey - Environmental Hazardous Substances List: | SN 1064 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Butane (mixed isomers)

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 0273 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - fourth degree |
| New Jersey - Environmental Hazardous Substances List: | SN 0273 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Hexane Isomers (other than n-Hexane)

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1285 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants: | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Toluene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Developmental toxicity, initial date 1/1/91<br>Female reproductive toxicity, initial date 8/7/09 |
| New Jersey Right-To-Know: | SN 1866 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic (skin); Flammable (skin) |
| Michigan Critical Materials Register List: | 100 lb Annual usage threshold |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |

| | |
|---|---|
| New Jersey - Special Hazardous Substances: | Flammable - third degree; Teratogen |
| New Jersey - Environmental Hazardous Substances List: | SN 1866 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1000 lb RQ (air); 1 lb RQ (land/water) |

Xylene (mixed isomers)

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 2014 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic (skin); Flammable (skin) |
| Michigan Critical Materials Register List: | 100 lb Annual usage threshold all isomers |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 2014 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1000 lb RQ (air); 1 lb RQ (land/water) |

n-Hexane

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1340 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 1340 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1 lb RQ (air); 1 lb RQ (land/water) |

Cumene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Carcinogen, initial date 4/6/10 |
| New Jersey Right-To-Know: | SN 0542 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic (skin); Flammable (skin) |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 0542 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Present |

| | |
|---|---|
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 5000 lb RQ (air); 1 lb RQ (land/water) |

1,2,4 Trimethylbenzene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1929 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Ethylbenzene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Carcinogen, initial date 6/11/04 |
| New Jersey Right-To-Know: | SN 0851 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Carcinogen; flammable - Third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 0851 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1000 lb RQ (air); 1 lb RQ (land/water) |

Benzene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Carcinogen, initial date 2/27/87<br>Developmental toxicity, initial date 12/26/97<br>Male reproductive toxicity, initial date 12/26/97 |
| New Jersey Right-To-Know: | SN 0197 |
| Pennsylvania Right-To-Know: | Environmental hazard; Special hazardous substance |
| Massachusetts Right-To Know: | Carcinogen; Extraordinarily hazardous |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic (skin); Flammable (skin); Carcinogen (skin) |
| Michigan Critical Materials Register List: | 100 lb Annual usage threshold |
| Massachusetts Extraordinarily Hazardous Substances: | Carcinogen; Extraordinarily hazardous |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Present |
| New Jersey - Special Hazardous Substances: | Carcinogen; Flammable - third degree; Mutagen |
| New Jersey - Environmental Hazardous Substances List: | SN 0197 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 10 lb RQ (air); 1 lb RQ (land/water) |

Cyclohexane

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 0565 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 0565 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1000 lb RQ (air); 1 lb RQ (land/water) |

Octane

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1434 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants: | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

1,2,3-trimethylbenzene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1929 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Naphthalene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Carcinogen, initial date 4/19/02 |
| New Jersey Right-To-Know: | SN 1322 SN 3758 |

| | |
|---|---|
| Pennsylvania Right-To-Know: | Environmental hazard Present (particulate) |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Carcinogen |
| New Jersey - Environmental Hazardous Substances List: | SN 1322 TPQ: 500 lb (Reportable at the de minimis quantity of >0.1%) |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 100 lb RQ (air); 1 lb RQ (land/water) |

**Canada DSL/NDSL Inventory:** This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt.

**Canadian Regulatory Information:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the (M)SDS contains all the information required by the Controlled Products Regulations.

| Name | Canada - WHMIS: Classifications of Substances: | Canada - WHMIS: Ingredient Disclosure: |
|---|---|---|
| Gasoline | B2,D2A,D2B | 0.1% |
| Heptane (mixed isomers) | B2,D2B | 1% |
| Pentane (mixed isomers) | B2 | 1% |
| Butane (mixed isomers) | A,B1 | 1% |
| Hexane Isomers (other than n-Hexane) | B2 | 1% |
| Toluene | B2,D2A,D2B | 0.1% |
| Xylene (mixed isomers) | B2,D2A,D2B | m-, o-isomers 1.0%; p-isomer 0.1% |
| n-Hexane | B2,D2A,D2B | 1% |
| Cumene | B2,D2A | 0.1% |
| 1,2,4 Trimethylbenzene | B3,D2B | 1% |
| Ethylbenzene | B2,D2A,D2B | 0.1% |
| Benzene | B2,D2A,D2B | 0.1% |
| Cyclohexane | B2,D2B | 1% |
| Octane | B2,D2B | 1% |
| 1,2,3-trimethylbenzene | B3 | 1% |
| Naphthalene | B4,D2A | 0.1% |



**Note:** Not applicable.

## 16. OTHER INFORMATION

**Prepared By** Toxicology and Product Safety

**Revision Date:** 06/01/2016

**Revision Note:**

**Revised Sections**

The following sections (§) have been updated:
1. IDENTIFICATION
2. HAZARD IDENTIFICATION
3. COMPOSITION/INFORMATION ON INGREDIENTS
4. FIRST AID MEASURES
6. ACCIDENTAL RELEASE MEASURES
7. HANDLING AND STORAGE
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
9. PHYSICAL AND CHEMICAL PROPERTIES
11. TOXICOLOGICAL INFORMATION
12. ECOLOGICAL INFORMATION
15. REGULATORY INFORMATION

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is intended as guidance for safe handling, use, processing, storage, transportation, accidental release, clean-up and disposal and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

# SAFETY DATA SHEET

Helium

## Section 1. Identification

**GHS product identifier** : Helium

**Chemical name** : Helium

**Other means of identification** : helium (dot); Helium-4; He; o-Helium; UN 1046

**Product use** : Synthetic/Analytical chemistry.

**Synonym** : helium (dot); Helium-4; He; o-Helium; UN 1046

**SDS #** : 001025

**Supplier's details** : Airgas USA, LLC and its affiliates
259 North Radnor-Chester Road
Suite 100
Radnor, PA 19087-5283
1-610-687-5253

**Emergency telephone number (with hours of operation)** : 1-866-734-3438

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : GASES UNDER PRESSURE - Compressed gas

**GHS label elements**

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : Contains gas under pressure; may explode if heated.
May displace oxygen and cause rapid suffocation.

**Precautionary statements**

**General** : Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction.

**Prevention** : Use and store only outdoors or in a well ventilated place.

**Response** : Not applicable.

**Storage** : Protect from sunlight. Protect from sunlight when ambient temperature exceeds 52°C/125°F. Store in a well-ventilated place.

**Disposal** : Not applicable.

**Hazards not otherwise classified** : In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.



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# Section 3. Composition/information on ingredients

**Substance/mixture** : Substance

**Chemical name** : Helium

**Other means of identification** : helium (dot); Helium-4; He; o-Helium; UN 1046

## CAS number/other identifiers

**CAS number** : 7440-59-7

**Product code** : 001025

| Ingredient name | % | CAS number |
|---|---|---|
| Helium | 100 | 7440-59-7 |

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

# Section 4. First aid measures

## Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : As this product is a gas, refer to the inhalation section.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** : Contact with rapidly expanding gas may cause burns or frostbite.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Contact with rapidly expanding gas may cause burns or frostbite.

**Frostbite** : Try to warm up the frozen tissues and seek medical attention.

**Ingestion** : As this product is a gas, refer to the inhalation section.

### Over-exposure signs/symptoms

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

## Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.



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## Section 4. First aid measures

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**See toxicological information (Section 11)**

## Section 5. Fire-fighting measures

**Extinguishing media**

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.

**Hazardous thermal decomposition products** : No specific data.

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up**

**Small spill** : Immediately contact emergency personnel. Stop leak if without risk.

**Large spill** : Immediately contact emergency personnel. Stop leak if without risk. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.



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# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| Ingredient name | Exposure limits |
|---|---|
| Helium | Oxygen Depletion [Asphyxiant] |

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

**Skin protection**



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## Section 8. Exposure controls/personal protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

**Appearance**

**Physical state** : Gas. [Compressed gas.]

**Color** : Colorless.

**Molecular weight** : 4 g/mole

**Molecular formula** : He

**Boiling/condensation point** : -268.9°C (-452°F)

**Melting/freezing point** : -272.2°C (-458°F)

**Critical temperature** : -267.9°C (-450.2°F)

**Odor** : Odorless.

**Odor threshold** : Not available.

**pH** : Not available.

**Flash point** : [Product does not sustain combustion.]

**Burning time** : Not applicable.

**Burning rate** : Not applicable.

**Evaporation rate** : Not available.

**Flammability (solid, gas)** : Not available.

**Lower and upper explosive (flammable) limits** : Not available.

**Vapor pressure** : Not available.

**Vapor density** : 0.14 (Air = 1) Liquid Density@BP: 7.8 lb/ft3 (125 kg/m3)

**Specific Volume (ft $^3$/lb)** : 96.1538

**Gas Density (lb/ft $^3$)** : 0.0104

**Relative density** : Not applicable.

**Solubility** : Not available.

**Solubility in water** : Not available.

**Partition coefficient: n-octanol/water** : 0.28

**Auto-ignition temperature** : Not available.

**Decomposition temperature** : Not available.



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## Section 9. Physical and chemical properties

**SADT** : Not available.

**Viscosity** : Not applicable.

## Section 10. Stability and reactivity

**Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability** : The product is stable.

**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : No specific data.

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Not available.

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.



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# Section 11. Toxicological information

**Information on the likely routes of exposure** : Not available.

## Potential acute health effects

**Eye contact** : Contact with rapidly expanding gas may cause burns or frostbite.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Contact with rapidly expanding gas may cause burns or frostbite.

**Ingestion** : As this product is a gas, refer to the inhalation section.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## Numerical measures of toxicity

### Acute toxicity estimates

Not available.

# Section 12. Ecological information

## Toxicity

Not available.

## Persistence and degradability

Not available.



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# Section 12. Ecological information

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Helium | 0.28 | - | low |

## Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

# Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

# Section 14. Transport information

| | DOT | TDG | Mexico | IMDG | IATA |
|---|---|---|---|---|---|
| **UN number** | UN1046 | UN1046 | UN1046 | UN1046 | UN1046 |
| **UN proper shipping name** | HELIUM, COMPRESSED | HELIUM, COMPRESSED | HELIUM, COMPRESSED | HELIUM, COMPRESSED | HELIUM, COMPRESSED |
| **Transport hazard class(es)** | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   |
| **Packing group** | - | - | - | - | - |
| **Environment** | No. | No. | No. | No. | No. |
| **Additional information** | **Limited quantity** Yes.<br><br>**Packaging instruction**<br>**Passenger aircraft** Quantity limitation: 75 kg<br><br>**Cargo aircraft** Quantity limitation: 150 kg | **Explosive Limit and Limited Quantity Index** 0.125<br><br>**Passenger Carrying Road or Rail Index** 75 | - | - | **Passenger and Cargo Aircraft**Quantity limitation: 75 kg<br>**Cargo Aircraft Only** Quantity limitation: 150 kg |

**"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."**



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## Section 14. Transport information

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

**United States inventory (TSCA 8b)**: This material is listed or exempted.

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : Sudden release of pressure

**Composition/information on ingredients**

| Name | % | Fire hazard | Sudden release of pressure | Reactive | Immediate (acute) health hazard | Delayed (chronic) health hazard |
|---|---|---|---|---|---|---|
| Helium | 100 | No. | Yes. | No. | No. | No. |

**State regulations**

**Massachusetts** : This material is listed.

**New York** : This material is not listed.

**New Jersey** : This material is listed.

**Pennsylvania** : This material is listed.

**Canada inventory** : This material is listed or exempted.

**International regulations**



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# Section 15. Regulatory information

**International lists** : **Australia inventory (AICS)**: This material is listed or exempted.
**China inventory (IECSC)**: This material is listed or exempted.
**Japan inventory**: Not determined.
**Korea inventory**: This material is listed or exempted.
**Malaysia Inventory (EHS Register)**: Not determined.
**New Zealand Inventory of Chemicals (NZIoC)**: This material is listed or exempted.
**Philippines inventory (PICCS)**: This material is listed or exempted.
**Taiwan inventory (CSNN)**: Not determined.

**Chemical Weapons Convention List Schedule I Chemicals** : Not listed

**Chemical Weapons Convention List Schedule II Chemicals** : Not listed

**Chemical Weapons Convention List Schedule III Chemicals** : Not listed

## Canada

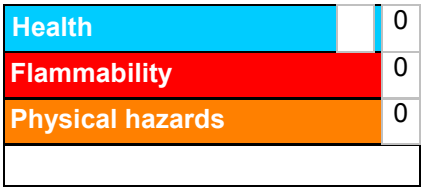
**WHMIS (Canada)** : Class A: Compressed gas.

**CEPA Toxic substances**: This material is not listed.
**Canadian ARET**: This material is not listed.
**Canadian NPRI**: This material is not listed.
**Alberta Designated Substances**: This material is not listed.
**Ontario Designated Substances**: This material is not listed.
**Quebec Designated Substances**: This material is not listed.

# Section 16. Other information

**Canada Label requirements** : Class A: Compressed gas.

## Hazardous Material Information System (U.S.A.)




**Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.**

**The customer is responsible for determining the PPE code for this material.**

## National Fire Protection Association (U.S.A.)

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# Section 16. Other information

**Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.**

## History

**Date of printing** : 10/15/2014.

**Date of issue/Date of revision** : 10/15/2014.

**Date of previous issue** : 10/2/2014.

**Version** : 0.02

**Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United NationsACGIH – American Conference of Governmental Industrial Hygienists
AIHA – American Industrial Hygiene Association
CAS – Chemical Abstract Services
CEPA – Canadian Environmental Protection Act
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act (EPA)
CFR – United States Code of Federal Regulations
CPR – Controlled Products Regulations
DSL – Domestic Substances List
GWP – Global Warming Potential
IARC – International Agency for Research on Cancer
ICAO – International Civil Aviation Organisation
Inh – Inhalation
LC – Lethal concentration
LD – Lethal dosage
NDSL – Non-Domestic Substances List
NIOSH – National Institute for Occupational Safety and Health
TDG – Canadian Transportation of Dangerous Goods Act and Regulations
TLV – Threshold Limit Value
TSCA – Toxic Substances Control Act
WEEL – Workplace Environmental Exposure Level
WHMIS – Canadian Workplace Hazardous Material Information System

**References** : Not available.

**Indicates information that has changed from previously issued version.**

## Notice to reader

**To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**
**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.**



Powered by IHS

# SAFETY DATA SHEET

Version 5.6
Revision Date 04/24/2015
Print Date 02/09/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Heptachlor

Product Number : PS78
Brand : Supelco
Index-No. : 602-046-00-2

CAS-No. : 76-44-8

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 2), H300
Acute toxicity, Dermal (Category 2), H310
Carcinogenicity (Category 2), H351
Specific target organ toxicity - repeated exposure (Category 2), H373
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H300 + H310 Fatal if swallowed or in contact with skin
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

| | |
|---|---|
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. |
| P262 | Do not get in eyes, on skin, or on clothing. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. |
| P302 + P350 | IF ON SKIN: Gently wash with plenty of soap and water. |
| P310 | Immediately call a POISON CENTER or doctor/ physician. |
| P322 | Specific measures (see supplemental first aid instructions on this label). |
| P330 | Rinse mouth. |
| P361 | Remove/Take off immediately all contaminated clothing. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Synonyms | : | 1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene |
| Formula | : | $C_{10}H_5Cl_7$ |
| Molecular weight | : | 373.32 g/mol |
| CAS-No. | : | 76-44-8 |
| EC-No. | : | 200-962-3 |
| Index-No. | : | 602-046-00-2 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Heptachlor** | | |
| | Acute Tox. 2; Carc. 2; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H300 + H310, H351, H373, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides, Hydrogen chloride gas

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Heptachlor | 76-44-8 | TWA | 0.050000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Skin contact does contribute to exposure.<br>Confirmed animal carcinogen with unknown relevance to humans | | |
| | | TWA | 0.5 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Skin designation | | |

| | | | | |
|---|---|---|---|---|
| | | TWA | 0.500000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Skin designation | | |
| | | TWA | 0.500000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix A<br>Potential for dermal absorption | | |
| | | TWA | 0.05 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Liver damage<br>Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | No data available |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - 40.0 mg/kg

Inhalation: No data available

LD50 Dermal - Rat - 119.0 mg/kg

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (Heptachlor) |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: PC0700000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Oncorhynchus mykiss (rainbow trout) - 0.007 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic | LC50 - Daphnia magna (Water flea) - 0.078 mg/l - 48 h |

invertebrates

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
Bioaccumulation Pimephales promelas (fathead minnow) - 276 d
- 0.00043 mg/l

Bioconcentration factor (BCF): 23,814

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

No data available

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2811 Class: 6.1 Packing group: II
Proper shipping name: Toxic solids, organic, n.o.s. (Heptachlor)
Reportable Quantity (RQ): 1 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 2811 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Heptachlor)
Marine pollutant:yes

**IATA**
UN number: 2811 Class: 6.1 Packing group: II
Proper shipping name: Toxic solid, organic, n.o.s. (Heptachlor)

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Heptachlor | 76-44-8 | 2007-03-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Heptachlor | 76-44-8 | 2007-03-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Heptachlor | 76-44-8 | 2007-03-01 |

**California Prop. 65 Components**

| | | |
|---|---|---|
| WARNING! This product contains a chemical known to the State of California to cause cancer.<br>Heptachlor | CAS-No.<br>76-44-8 | Revision Date<br>2007-09-28 |
| WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.<br>Heptachlor | CAS-No.<br>76-44-8 | Revision Date<br>2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H300 | Fatal if swallowed. |
| H300 + H310 | Fatal if swallowed or in contact with skin |
| H310 | Fatal in contact with skin. |
| H351 | Suspected of causing cancer. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 4 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.6 Revision Date: 04/24/2015 Print Date: 02/09/2016

# SAFETY DATA SHEET

Version 3.8
Revision Date 04/24/2015
Print Date 04/01/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Hexachlorobenzene

Product Number : 171050
Brand : Aldrich
Index-No. : 602-065-00-6

CAS-No. : 118-74-1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Carcinogenicity (Category 1B), H350
Specific target organ toxicity - repeated exposure, Oral (Category 1), H372
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H350 May cause cancer.
H372 Causes damage to organs through prolonged or repeated exposure if swallowed.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.

| | |
|---|---|
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P281 | Use personal protective equipment as required. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $C_6Cl_6$ |
| Molecular weight | : | 284.78 g/mol |
| CAS-No. | : | 118-74-1 |
| EC-No. | : | 204-273-9 |
| Index-No. | : | 602-065-00-6 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Hexachlorobenzene** | | |
| | Carc. 1B; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H350, H372, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Hexachlorobenzene | 118-74-1 | TWA | 0.002000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Central Nervous System impairment<br>Porphyrin effects<br>Skin damage<br>Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: powder<br>Colour: white |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 227 - 229 °C (441 - 444 °F) - lit. |
| f) | Initial boiling point and boiling range | 323 - 326 °C (613 - 619 °F) - lit. |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |

| | | |
|---|---|---|
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 10,000 mg/kg

LD50 Oral - Mouse - 4,000 mg/kg

LD50 Oral - Cat - 1,700 mg/kg

LD50 Oral - Rabbit - 2,600 mg/kg

LD50 Oral - Guinea pig - > 3,000 mg/kg

LD50 Oral - Quail - > 6,400 mg/kg

LD50 Oral - Mammal - > 5,000 mg/kg
Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Change in motor activity (specific assay).

LC50 Inhalation - Rat - 3,600 mg/m3

LC50 Inhalation - Mouse - 4,000 mg/m3

LC50 Inhalation - Cat - 1,600 mg/m3

LC50 Inhalation - Rabbit - 1,800 mg/m3

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
Causes photosensitivity. Exposure to light can result in allergic reactions resulting in dermatologic lesions, which can vary from sunburnlike responses to edematous, vesiculated lesions, or bullae

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Possible human carcinogen

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (Hexachlorobenzene) |
| NTP: | Reasonably anticipated to be a human carcinogen (Hexachlorobenzene) |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
Ingestion - Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

Liver -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Lepomis macrochirus (Bluegill) - 7.6 mg/l - 96.0 h |
| | NOEC - Pimephales promelas (fathead minnow) - > 0.0048 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | Immobilization EC50 - Daphnia magna (Water flea) - > 0.005 mg/l - 48 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
Bioaccumulation: Pimephales promelas (fathead minnow) - 32 d - 0.0003 mg/l

Bioconcentration factor (BCF): 22,000

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**

UN number: 2729 Class: 6.1 Packing group: III
Proper shipping name: Hexachlorobenzene
Reportable Quantity (RQ): 10 lbs

Poison Inhalation Hazard: No

**IMDG**

UN number: 2729 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: HEXACHLOROBENZENE
Marine pollutant:yes

**IATA**

UN number: 2729 Class: 6.1 Packing group: III
Proper shipping name: Hexachlorobenzene

## 15. REGULATORY INFORMATION

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Hexachlorobenzene | 118-74-1 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Hexachlorobenzene | 118-74-1 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Hexachlorobenzene | 118-74-1 | 2007-07-01 |

**California Prop. 65 Components**

| | | |
|---|---|---|
| WARNING! This product contains a chemical known to the State of California to cause cancer. Hexachlorobenzene | CAS-No. 118-74-1 | Revision Date 2007-09-28 |
| WARNING: This product contains a chemical known to the | CAS-No. | Revision Date |

| | | |
|---|---|---|
| State of California to cause birth defects or other reproductive harm.<br>Hexachlorobenzene | 118-74-1 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H350 | May cause cancer. |
| H372 | Causes damage to organs through prolonged or repeated exposure if swallowed. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 3.8 Revision Date: 04/24/2015 Print Date: 04/01/2016

# SAFETY DATA SHEET

Version 5.5
Revision Date 03/06/2015
Print Date 05/01/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Hexachlorocyclopentadiene

Product Number : H6002
Brand : Aldrich
Index-No. : 602-078-00-7

CAS-No. : 77-47-4

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 1), H330
Acute toxicity, Dermal (Category 3), H311
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H330 Fatal if inhaled.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

| | |
|---|---|
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P284 | Wear respiratory protection. |
| P301 + P312 | IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER or doctor/ physician. |
| P320 | Specific treatment is urgent (see supplemental first aid instructions on this label). |
| P361 | Remove/Take off immediately all contaminated clothing. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Lachrymator.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | $C_5Cl_6$ |
| Molecular weight | : | 272.77 g/mol |
| CAS-No. | : | 77-47-4 |
| EC-No. | : | 201-029-3 |
| Index-No. | : | 602-078-00-7 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Hexachlorocyclopentadiene** | | |
| | Acute Tox. 4; Acute Tox. 1; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 1; H302, H311, H314, H330, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.Continue rinsing eyes during transport to hospital.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Moisture sensitive.

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Hexachlorocyclopentadiene | 77-47-4 | TWA | 0.010000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Upper Respiratory Tract irritation<br>Not classifiable as a human carcinogen | | |
| | | TWA | 0.010000 ppm<br>0.100000 mg/m3 | USA. NIOSH Recommended Exposure Limits |

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -10 °C (14 °F) - lit. |
| f) | Initial boiling point and boiling range | 239 °C (462 °F) at 1,004 hPa (753 mmHg) - lit. |
| g) | Flash point | 109.0 °C (228.2 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |

| | | |
|---|---|---|
| m) | Relative density | 1.702 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 315.0 mg/kg

LC50 Inhalation - Rat - 4.0 h - 2. ppm
Remarks: Behavioral:Somnolence (general depressed activity). Lungs, Thorax, or Respiration:Other changes.

LD50 Dermal - Rabbit - 430.0 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Severe skin irritation - 4 h

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Severe eye irritation - 0.1 h

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: GY1225000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | NOEC - Lepomis macrochirus (Bluegill) - 0.065 mg/l - 96.0 h |
| | LC50 - Pimephales promelas (fathead minnow) - 0.0070 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | Immobilization EC50 - Daphnia magna (Water flea) - 0.21 mg/l - 24 h |
| | NOEC - Daphnia magna (Water flea) - 0.018 mg/l - 48 h |

### 12.2 Persistence and degradability

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Leuciscus idus (Golden orfe) - 3 d<br>- 0.048 mg/l |
| | Bioconcentration factor (BCF): 1,230 |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2646 Class: 6.1 Packing group: I
Proper shipping name: Hexachlorocyclopentadiene
Reportable Quantity (RQ): 10 lbs

Poison Inhalation Hazard: Hazard zone B

**IMDG**
UN number: 2646 Class: 6.1 Packing group: I EMS-No: F-A, S-A
Proper shipping name: HEXACHLOROCYCLOPENTADIENE
Marine pollutant:yes

**IATA**
UN number: 2646 Class: 6.1
Proper shipping name: Hexachlorocyclopentadiene
IATA Passenger: Not permitted for transport
IATA Cargo: Not permitted for transport

## 15. REGULATORY INFORMATION

**SARA 302 Components**
The following components are subject to reporting levels established by SARA Title III, Section 302:

| | CAS-No. | Revision Date |
|---|---|---|
| Hexachlorocyclopentadiene | 77-47-4 | 2008-11-03 |

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Hexachlorocyclopentadiene | 77-47-4 | 2008-11-03 |

**SARA 311/312 Hazards**
Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Hexachlorocyclopentadiene | 77-47-4 | 2008-11-03 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Hexachlorocyclopentadiene | 77-47-4 | 2008-11-03 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Hexachlorocyclopentadiene | 77-47-4 | 2008-11-03 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Eye Dam. | Serious eye damage |
| H302 | Harmful if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H330 | Fatal if inhaled. |
| H400 | Very toxic to aquatic life. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 4 |
| Chronic Health Hazard: | |
| Flammability: | 1 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 4 |
| Fire Hazard: | 1 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.5 Revision Date: 03/06/2015 Print Date: 05/01/2016

# SAFETY DATA SHEET

Version 4.10
Revision Date 12/10/2015
Print Date 04/20/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Hexachloroethane

Product Number : 185442
Brand : Aldrich

CAS-No. : 67-72-1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Carcinogenicity (Category 2), H351
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and

| | |
|---|---|
| | understood. |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear eye protection/ face protection. |
| P280 | Wear protective gloves. |
| P281 | Use personal protective equipment as required. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 + P312 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Synonyms : Perchloroethane

Formula : $C_2Cl_6$

Molecular weight : 236.74 g/mol

CAS-No. : 67-72-1

EC-No. : 200-666-4

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Hexachloroethane** | | |
| | Skin Irrit. 2; Eye Irrit. 2A; Carc. 2; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H315, H319, H335, H351, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non Combustible Solids

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Hexachloroethane | 67-72-1 | TWA | 1.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Liver damage<br>Kidney damage | | |

| | | | | |
|---|---|---|---|---|
| | | Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |
| | | TWA | 1.000000 ppm<br>10.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential Occupational Carcinogen<br>See Appendix C<br>See Appendix A<br>Potential for dermal absorption | | |
| | | TWA | 1.000000 ppm<br>10.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Skin designation<br>The value in mg/m3 is approximate. | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: crystalline<br>Colour: white |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 183 - 185 °C (361 - 365 °F) |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | 0.5 hPa (0.4 mmHg) at 20.0 °C (68.0 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 2.091 g/mL at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents, Strong bases

### 10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Guinea pig - 4,970 mg/kg

TDLo Oral - Rat - female - 5,500 mg/kg

TDLo Oral - Rat - 6,944 mg/kg
Remarks: Liver:Changes in liver weight. Kidney, Ureter, Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis). Kidney, Ureter, Bladder:Other changes.

TDLo Oral - Rat - 48,750 mg/kg
Remarks: Brain and Coverings:Other degenerative changes. Liver:Changes in liver weight. Kidney, Ureter, Bladder:Other changes.

TDLo Oral - Rabbit - 12,000 mg/kg
Remarks: Liver:Other changes. Kidney, Ureter, Bladder:Other changes. Nutritional and Gross Metabolic:Weight loss or decreased weight gain.

Inhalation: Behavioral:Muscle weakness.

LD50 Dermal - Rabbit - 32,000 mg/kg

LD50 Intraperitoneal - Mouse - 4,500 mg/kg

LDLO Intraperitoneal - Rat - 2,900 mg/kg

LDLO Intravenous - Dog - 325 mg/kg

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**

Hamster - ovary
Sister chromatid exchange

**Carcinogenicity**

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (Hexachloroethane) |
| NTP: | Reasonably anticipated to be a human carcinogen (Hexachloroethane) |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: KI4025000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Kidney -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | NOEC - Cyprinodon variegatus (sheepshead minnow) - 1 mg/l - 96 h |
| Toxicity to daphnia and other aquatic invertebrates | LC50 - Daphnia magna (Water flea) - 1.36 mg/l - 48 h |

### 12.2 Persistence and degradability

| | |
|---|---|
| Biodegradability | Result: - Not biodegradable<br>(OECD Test Guideline 301) |

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Lepomis macrochirus (Bluegill) - 28 d<br>- 0.00617 mg/l<br><br>Bioconcentration factor (BCF): 139 |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

No data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Hexachloroethane)
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Hexachloroethane)
Marine pollutant:yes

**IATA**

UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Hexachloroethane)

**Further information**

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

## 15. REGULATORY INFORMATION

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Hexachloroethane | 67-72-1 | 2007-07-01 |

**SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Hexachloroethane | 67-72-1 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Hexachloroethane | 67-72-1 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Hexachloroethane | 67-72-1 | 2007-07-01 |

**California Prop. 65 Components**

| | | |
|---|---|---|
| WARNING! This product contains a chemical known to the State of California to cause cancer. Hexachloroethane | CAS-No. 67-72-1 | Revision Date 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| Eye Irrit. | Eye irritation |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.10 Revision Date: 12/10/2015 Print Date: 04/20/2016

# SAFETY DATA SHEET

**Issuing Date** no data available **Revision Date** 29-Oct-2015 **Revision Number** 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

| | |
|---|---|
| **Product Number** | **019** |
| **Product Name** | **Hexavalent Chromium - 1000 mg/L, 125 mL** |
| **Synonyms** | None |

**Recommended use of the chemical and restrictions on use**

| | |
|---|---|
| **Recommended Use** | Laboratory use only |
| **Uses advised against** | No information available |

**Details of the supplier of the safety data sheet**

| | |
|---|---|
| **Supplier** | ERA a Waters Company |
| **Supplier Address** | 16341 Table Mountain Parkway, Golden, CO 80403 USA |
| **Non-Emergency Telephone Number** | +1-303-431-8454 |
| **Supplier Email** | sdsinfo@waters.com |

**Emergency telephone number**

| | |
|---|---|
| **Company Emergency Phone Number** | In case of EMERGENCY call CHEMTREC Day or Night<br>Within USA and Canada: 800-424-9300<br>International Call Collect: +1-703-527-3887 |

## 2. HAZARDS IDENTIFICATION

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

| | |
|---|---|
| Respiratory sensitization | Category 1 |
| Skin sensitization | Category 1 |
| Germ cell mutagenicity | Category 1B |
| Carcinogenicity | Category 1A |
| Reproductive Toxicity | Category 1B |

**GHS Label elements, including precautionary statements**

**Emergency Overview**

**Signal word** **Danger**

**Hazard Statements**

May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
May cause genetic defects
May cause cancer
May damage fertility or the unborn child



**Appearance** Yellow **Physical state** Liquid->Liquid **Odor** Odorless

**Precautionary Statements - Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
**Precautionary Statements - Response**
IF exposed or concerned: Get medical advice/attention
Specific treatment (see supplemental first aid instructions on this label)
**Skin**
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
**Inhalation**
IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

**Precautionary Statements - Storage**
Store locked up
**Precautionary Statements - Disposal**
Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable
**Unknown Toxicity**
0 % of the mixture consists of ingredient(s) of unknown toxicity
**Other information**

Harmful to aquatic life with long lasting effects
Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
**Interactions with Other Chemicals**
No information available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Note: only the components contributing to the product's GHS hazard classification are listed in this section.

**Synonyms** None.

| Chemical Name | CAS-No | Percent |
|---|---|---|
| Potassium Dichromate | 7778-50-9 | 0.25 |

## 4. FIRST AID MEASURES

**First aid measures**

**General Advice** Show this safety data sheet to the doctor in attendance.
**Eye contact** Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.
**Skin contact** Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
**Inhalation** MAY CAUSE ALLERGIC RESPIRATORY REACTION. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Seek immediate medical attention/advice.
**Ingestion** May produce an allergic reaction. If an allergic reaction occurs, stop use and seek medical help right away. Do NOT induce vomiting. Rinse mouth immediately and drink plenty of

water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

**Self-protection of the first aider** Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Wear personal protective clothing (see section 8).

**Most important symptoms and effects, both acute and delayed**

**Most Important Symptoms and Effects** Itching. Rashes. Hives. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing.

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician** May cause sensitization in susceptible persons. Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

Product is or contains a sensitizer. May cause sensitization by skin contact. May cause sensitization by inhalation and skin contact.

**Uniform Fire Code** Sensitizer: Liquid

**Hazardous Combustion Products**

Carbon oxides.

**Explosion Data**

**Sensitivity to Mechanical Impact** No.

**Sensitivity to Static Discharge** No.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Other Information** Refer to protective measures listed in Sections 7 and 8.

**Environmental precautions**

**Environmental precautions** Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers. Soak up with inert absorbent material.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

**Incompatible Products** None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines**

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Potassium Dichromate<br>7778-50-9 | TWA: 0.05 mg/m³ Cr | TWA: 5 µg/m³<br>Action Level: 2.5 µg/m³ Cr<br>(vacated) Ceiling: 0.1 mg/m³<br>Ceiling: 0.1 mg/m³ CrO3 applies to any operations or sectors for which the Hexavalent Chromium standard [29 CFR 1910.1026] is stayed or is otherwise not in effect | IDLH: 15 mg/m³ Cr(VI)<br>TWA: 0.0002 mg/m³ Cr |

*ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits NIOSH IDLH Immediately Dangerous to Life or Health*

**Appropriate engineering controls**

**Engineering Measures** Showers
Eyewash stations
Ventilation systems

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical and Chemical Properties**

| | | | |
|---|---|---|---|
| **Physical state** | Liquid->Liquid | | |
| **Appearance** | Yellow | **Odor** | Odorless |
| **Color** | No information available | **Odor Threshold** | No information available |

| Property | Values | Remarks Method |
|---|---|---|
| **pH** | 5 | None known |
| **Melting / freezing point** | no data available | None known |
| **Boiling point / boiling range** | no data available | None known |
| **Flash Point** | no data available | None known |
| **Evaporation Rate** | no data available | None known |
| **Flammability (solid, gas)** | no data available | None known |

| | | |
|---|---|---|
| **Flammability Limit in Air** | | |
| **Upper flammability limit** | no data available | |
| **Lower flammability limit** | no data available | |
| **Vapor pressure** | no data available | None known |
| **Vapor density** | no data available | None known |
| **Specific Gravity** | 1 | None known |
| **Water Solubility** | Soluble in water | None known |
| **Solubility in other solvents** | no data available | None known |
| **Partition coefficient: n-octanol/water** | no data available | None known |
| **Autoignition temperature** | no data available | None known |
| **Decomposition temperature** | no data available | None known |
| **Kinematic viscosity** | no data available | None known |
| **Dynamic viscosity** | no data available | None known |
| **Explosive properties** | no data available | |
| **Oxidizing properties** | no data available | |

**Other Information**

| | |
|---|---|
| **Softening Point** | no data available |
| **Particle Size** | no data available |
| **Particle Size Distribution** | |

## 10. STABILITY AND REACTIVITY

**Reactivity**

no data available.

**Chemical stability**
Stable under recommended storage conditions.
**Possibility of Hazardous Reactions**
None under normal processing.
**Hazardous Polymerization**
Hazardous polymerization does not occur.
**Conditions to avoid**
None known based on information supplied.
**Incompatible materials**
None known based on information supplied.
**Hazardous Decomposition Products**
Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

| | |
|---|---|
| **Product Information** | . |
| **Inhalation** | May cause allergy or asthma symptoms or breathing difficulties if inhaled. Specific test data for the substance or mixture is not available. May cause sensitization in susceptible persons. (based on components). |
| **Eye contact** | Specific test data for the substance or mixture is not available. |
| **Skin contact** | Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). |
| **Ingestion** | Specific test data for the substance or mixture is not available. May cause additional affects as listed under "Inhalation". |

**Component Information**

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Potassium Dichromate<br>7778-50-9 | = 25 mg/kg ( Rat ) = 48 mg/kg ( Rat ) | = 1150 mg/kg ( Rabbit ) = 14 mg/kg ( Rabbit ) | - |

**Information on toxicological effects**

**Symptoms** Itching. Rashes. Hives. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** May cause sensitization in susceptible persons. May cause sensitization by skin contact. May cause sensitization by inhalation.

**Mutagenic Effects** There is no data for this product. Contains a known or suspected mutagen.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| Potassium Dichromate 7778-50-9 | A1 | Group 1 | Known | X |

*ACGIH (American Conference of Governmental Industrial Hygienists)*
*A1 - Known Human Carcinogen*
*IARC (International Agency for Research on Cancer)*
*Group 1 - Carcinogenic to Humans*
*NTP (National Toxicology Program)*
*Known - Known Carcinogen*
*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*
*X - Present*

**Reproductive toxicity** Contains a known or suspected reproductive toxin.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Chronic toxicity** No known effect based on information supplied. Prolonged exposure may cause chronic effects. Repeated contact may cause allergic reactions in very susceptible persons. Contains a known or suspected mutagen. Possible risk of irreversible effects. Contains a known or suspected carcinogen. Contains a known or suspected reproductive toxin.

**Target Organ Effects** Skin. Respiratory system. Eyes. May affect the genetic material in germ cells (sperm and eggs). Gastrointestinal tract (GI). Reproductive system.

**Aspiration Hazard** No information available.

**Numerical measures of toxicity Product Information**

**The following values are calculated based on chapter 3.1 of the GHS document**

**ATEmix (oral)**
40,000.00 mg/kg
**ATEmix (inhalation-dust/mist)**
20.04 mg/L

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

| Chemical Name | Toxicity to Algae | Toxicity to Fish | Toxicity to Microorganisms | Daphnia Magna (Water Flea) |
|---|---|---|---|---|
| Potassium Dichromate 7778-50-9 | | 96h LC50: > 139 mg/L (Cyprinus carpio) 96h LC50: 113.6 - 155.7 mg/L (Lepomis macrochirus) 96h LC50: = 320 mg/L (Lepomis macrochirus) 96h LC50: 65.6 - 137.6 mg/L (Lepomis macrochirus) 96h LC50: = 12.3 mg/L (Oncorhynchus mykiss) 96h LC50: 21.209 - 30.046 mg/L (Oryzias latipes) 96h LC50: 15.41 - 30.36 mg/L (Pimephales promelas) 96h LC50: 14 - 20.9 mg/L (Pimephales promelas) 96h LC50: 24.81 - 34.55 mg/L (Poecilia reticulata) 96h LC50: 23 - 41.2 mg/L (Poecilia reticulata) 96h LC50: = 26 mg/L (Morone saxatilis) | | |

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available

**Other adverse effects**

No information available.

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal methods** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging** Dispose of contents/containers in accordance with local regulations.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste |
|---|---|
| Potassium Dichromate 7778-50-9 | Toxic<br>Corrosive<br>Ignitable |

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**Proper Shipping Name** NON REGULATED

**Hazard Class** N/A

**TDG** Not regulated

**MEX** Not regulated

**ICAO** Not regulated

**IATA** Not regulated
**Proper Shipping Name** NON REGULATED
**Special Provisions** None

**IMDG** Not regulated
**Special Provisions** None
**Marine Pollutant** Not applicable

**RID** Not regulated
**Special Provisions** None

**ADR** Not regulated
**Special Provisions** None

**ADN** Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

| | |
|---|---|
| TSCA | Complies |
| DSL | All components are listed either on the DSL or NDSL. |
| **ENCS** | Contact supplier for inventory compliance status |
| **KECL** | Contact supplier for inventory compliance status |
| **PICCS** | Contact supplier for inventory compliance status |
| **AICS** | Contact supplier for inventory compliance status |

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
**ENCS** - Japan Existing and New Chemical Substances
**IECSC** - China Inventory of Existing Chemical Substances
**KECL** - Korean Existing and Evaluated Chemical Substances
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances
**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | CAS-No | Percent | SARA 313 - Threshold Values % |
|---|---|---|---|
| Potassium Dichromate - 7778-50-9 | 7778-50-9 | 0.25 | 0.1 |

**SARA 311/312 Hazard Categories**

| | |
|---|---|
| **Acute Health Hazard** | Yes |
| **Chronic Health Hazard** | Yes |
| **Fire Hazard** | No |
| **Sudden release of pressure hazard** | No |
| **Reactive Hazard** | No |

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---|---|---|---|---|
| Potassium Dichromate 7778-50-9 | 10 lb | X | | X |

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive

Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|---|---|---|---|
| Potassium Dichromate<br>7778-50-9 | 10 lb | | RQ 10 lb final RQ<br>RQ 4.54 kg final RQ |

## US State Regulations

### California Proposition 65

This product contains the following Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

.

## International Regulations

| Component | Carcinogen Status | Exposure Limits |
|---|---|---|
| Potassium Dichromate<br>7778-50-9 ( 0.25 ) | A1 | Mexico: TWA 0.05 mg/m³ Mexico: TWA 0.5 mg/m³ |

*A1 - Confirmed Human Carcinogen*

**Canada**
**WHMIS Hazard Class**
Not determined

## 16. OTHER INFORMATION

| | | | | |
|---|---|---|---|---|
| **NFPA** | **Health Hazards** 2 | **Flammability** 0 | **Instability** 0 | **Physical and Chemical Hazards** - |
| **HMIS** | **Health Hazards** 2 * | **Flammability** 0 | **Physical Hazard** 0 | **Personal Protection** X |

**Chronic Hazard Star Legend** * = Chronic Health Hazard

**Prepared By**
Product Stewardship
23 British American Blvd.
Latham, NY 12110
1-800-572-6501

**Revision Date** 29-Oct-2015
**Revision Note** No information available

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

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**End of Safety Data Sheet**

# SAFETY DATA SHEET

Version 6.8
Revision Date 08/28/2024
Print Date 08/29/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Indeno[1,2,3-*cd*]pyrene

Product Number : 48499
Brand : Supelco
CAS-No. : 193-39-5

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Carcinogenicity (Category 2), H351

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word Warning

Hazard Statements
H351 Suspected of causing cancer.



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Precautionary Statements

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | $C_{22}H_{12}$ |
| Molecular weight | : | 276.33 g/mol |
| CAS-No. | : | 193-39-5 |
| EC-No. | : | 205-893-2 |

| Component | Classification | Concentration |
|---|---|---|
| **Indeno[1,2,3-cd]pyrene** | | |
| | Carc. 2; H351 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Call in physician.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

**If swallowed**
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.



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### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Water Foam Carbon dioxide (CO2) Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides
Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information
Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions
Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections
For disposal see section 13.



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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Work under hood. Do not inhale substance/mixture.

**Hygiene measures**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Dry. Keep locked up or in an area accessible only to qualified or authorized persons.

**Storage class**
Storage class (TRGS 510): 11: Combustible Solids

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
Handle with impervious gloves.

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm



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Break through time: 480 min
Material tested:KCL 741 Dermatril® L

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

**Body Protection**
protective clothing

**Respiratory protection**
Recommended Filter type: Filter type P3
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | 163.6 °C (326.5 °F) |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | ()Not applicable |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | No data available |
| l) | Vapor density | No data available |
| m) | Density | No data available |



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| | | |
|---|---|---|
| | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Autoignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

**10.2 Chemical stability**
The product is chemically stable under standard ambient conditions (room temperature) .

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
no information available

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
In the event of fire: see section 5

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Acute toxicity**
Oral: No data available
Inhalation: No data available
Dermal: No data available

**Skin corrosion/irritation**
Remarks: No data available



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**Serious eye damage/eye irritation**
Remarks: No data available

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**
This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Indeno[1,2,3-cd]pyrene)

NTP: RAHC - Reasonably anticipated to be a human carcinogen (Indeno[1,2,3-cd]pyrene)

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12: Ecological information

### 12.1 Toxicity
No data available

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties
No data available



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### 12.7 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**Further information**

Not classified as dangerous in the meaning of transport regulations.

## SECTION 15: Regulatory information

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 100 | 100 |

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Chronic Health Hazard



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**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

| | | |
|---|---|---|
| Indeno[1,2,3-cd]pyrene | 193-39-5 | >= 90 - <= 100 % |

**US State Regulations**

**Massachusetts Right To Know**

| | |
|---|---|
| Indeno[1,2,3-cd]pyrene | 193-39-5 |

**Pennsylvania Right To Know**

| | |
|---|---|
| Indeno[1,2,3-cd]pyrene | 193-39-5 |

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

**Washington Chemicals of High Concern**

Product does not contain any listed chemicals

**California Prop. 65**

WARNING: This product can expose you to chemicals including Indeno[1,2,3-cd]pyrene, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16: Other information

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the



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# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 6.8
Revision Date 30.05.2024
Print Date 16.09.2024
GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

| | | |
|---|---|---|
| Product name | : | Iron |
| Product Number | : | 12310 |
| Brand | : | Aldrich |
| REACH No. | : | 01-2119462838-24-XXXX |
| CAS-No. | : | 7439-89-6 |

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

| | | |
|---|---|---|
| Identified uses | : | Laboratory chemicals, Manufacture of substances |

### 1.3 Details of the supplier of the safety data sheet

| | | |
|---|---|---|
| Company | : | Sigma-Aldrich Inc.<br>3050 SPRUCE ST<br>ST. LOUIS MO 63103<br>UNITED STATES |
| Telephone | : | +1 314 771-5765 |
| Fax | : | +1 800 325-5052 |

### 1.4 Emergency telephone

| | | |
|---|---|---|
| Emergency Phone # | : | 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week |

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

| | |
|---|---|
| Flammable solids, (Category 1) | H228: Flammable solid. |
| Self-heating substances and mixtures, (Category 1) | H251: Self-heating; may catch fire. |

### 2.2 Label elements

**Labelling according Regulation (EC) No 1272/2008**



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| | |
|---|---|
| Pictogram |  |
| Signal Word | Danger |
| Hazard Statements | |
| H228 | Flammable solid. |
| H251 | Self-heating; may catch fire. |
| Precautionary Statements | |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P235 | Keep cool. |
| P240 | Ground and bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| Supplemental Hazard Statements | none |

**Reduced Labeling (<= 125 ml)**

| | |
|---|---|
| Pictogram |  |
| Signal Word | Danger |
| Hazard Statements | |
| H251 | Self-heating; may catch fire. |
| Precautionary Statements | |
| P235 | Keep cool. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| Supplemental Hazard Statements | none |

## 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Toxicological information:
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.



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## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | Fe |
| Molecular weight | : | 55,85 g/mol |
| CAS-No. | : | 7439-89-6 |
| EC-No. | : | 231-096-4 |

No components need to be disclosed according to the applicable regulations.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Remove contact lenses.

**If swallowed**
After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Water Foam Carbon dioxide (CO2) Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture

Iron oxides
Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.



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### 5.4 Further information
Suppress (knock down) gases/vapors/mists with a water spray jet.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions
Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up
Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections
For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on protection against fire and explosion**
Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.

**Hygiene measures**
Change contaminated clothing. Wash hands after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Keep away from heat and sources of ignition.

**Storage class**
Storage class (TRGS 510): 4.2: Pyrophoric and self-heating hazardous materials

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated



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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**

### 8.2 Exposure controls

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Body Protection**
Flame retardant antistatic protective clothing.

**Respiratory protection**
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
Recommended Filter type: Filter type P1

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

**Control of environmental exposure**
Do not let product enter drains. Risk of explosion.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Physical state | powder |
| b) | Color | light gray |
| c) | Odor | odorless |
| d) | Melting point/freezing point | Melting point/range: 1.538 °C at 1.023 hPa |
| e) | Initial boiling point and boiling range | 2.861 °C at 1.013 hPa |
| f) | Flammability (solid, gas) | The substance or mixture is a flammable solid with the category 1. |
| g) | Upper/lower flammability or explosive limits | No data available |
| h) | Flash point | Not applicable |
| i) | Autoignition temperature | The substance or mixture is classified as self heating with the category 1. |



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| | | |
|---|---|---|
| j) | Decomposition temperature | No data available |
| k) | pH | Not applicable |
| l) | Viscosity | Viscosity, kinematic: No data available<br>Viscosity, dynamic: No data available |
| m) | Water solubility | insoluble |
| n) | Partition coefficient: n-octanol/water | Not applicable for inorganic substances |
| o) | Vapor pressure | Not applicable |
| p) | Density | 7,87 g/cm3 at 20 °C |
| | Relative density | 7,87 at 20 °C |
| q) | Relative vapor density | |
| r) | Particle characteristics | No data available |
| s) | Explosive properties | Not classified as explosive. |
| t) | Oxidizing properties | The substance or mixture is not classified as oxidizing. |

### 9.2 Other safety information

Dust explosion class St1

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Self-heating; may catch fire.
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

no information available

### 10.5 Incompatible materials

Strong acids

### 10.6 Hazardous decomposition products

In the event of fire: see section 5



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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - 7.500 mg/kg
Remarks: (Lit.)
Inhalation: No data available
Dermal: No data available

**Skin corrosion/irritation**
Remarks: No skin irritation

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: No eye irritation
(OECD Test Guideline 405)
Remarks: (Lit.)

**Respiratory or skin sensitization**
Did not cause sensitization on laboratory animals.

**Germ cell mutagenicity**
Test system: S. typhimurium
Method: OECD Test Guideline 471
Result: Not mutagenic in Ames Test.
Remarks: (Lit.)

**Carcinogenicity**
No data available

**Reproductive toxicity**
Did not show teratogenic effects in animal experiments.
Animal testing did not show any effects on fertility.

**Specific target organ toxicity - single exposure**
The substance or mixture is not classified as specific target organ toxicant, single exposure.

**Specific target organ toxicity - repeated exposure**
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**Aspiration hazard**
No data available

### 11.2 Additional Information

**Endocrine disrupting properties**

**Product:**

| | |
|---|---|
| Assessment | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.



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## SECTION 12: Ecological information

### 12.1 Toxicity

| | | |
|---|---|---|
| Toxicity to fish | static test | - Morone saxatilis - 13,6 mg/l - 96 h |

### 12.2 Persistence and degradability
Not applicable

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties
**Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects
No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods
No data available

## SECTION 14: Transport information

### 14.1 UN number
ADR/RID: 3178 IMDG: 3178 IATA: 3178

### 14.2 UN proper shipping name
ADR/RID: FLAMMABLE SOLID, INORGANIC, N.O.S. (Iron Powder,)
IMDG: FLAMMABLE SOLID, INORGANIC, N.O.S. (Iron Powder,)
IATA: Flammable solid, inorganic, n.o.s. (Iron Powder,)



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**14.3 Transport hazard class(es)**

| | | |
|---|---|---|
| ADR/RID: 4.1 | IMDG: 4.1 | IATA: 4.1 |

**14.4 Packaging group**

| | | |
|---|---|---|
| ADR/RID: III | IMDG: III | IATA: III |

**14.5 Environmental hazards**

| | | |
|---|---|---|
| ADR/RID: no | IMDG Marine pollutant: no | IATA: no |

**14.6 Special precautions for user**

Tunnel restriction code : (E)

Further information : No data available

## SECTION 15: Regulatory information

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

**Other regulations**

Take note of Dir 94/33/EC on the protection of young people at work.

**15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out



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## SECTION 16: Other information

### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

### Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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# SAFETY DATA SHEET

Version 5.5
Revision Date 06/02/2016
Print Date 11/14/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Isophorone

Product Number : I18709
Brand : Aldrich
Index-No. : 606-012-00-8

CAS-No. : 78-59-1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Dermal (Category 4), H312
Eye irritation (Category 2A), H319
Carcinogenicity (Category 2), H351
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)
H302 + H312 Harmful if swallowed or in contact with skin
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.

| | |
|---|---|
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P312 + P330 | IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. |
| P302 + P352 + P312 | IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P363 | Wash contaminated clothing before reuse. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Synonyms | : | 3,5,5-Trimethyl-2-cyclohexen-1-one |
| Formula | : | $C_9H_{14}O$ |
| Molecular weight | : | 138.21 g/mol |
| CAS-No. | : | 78-59-1 |
| EC-No. | : | 201-126-0 |
| Index-No. | : | 606-012-00-8 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Isophorone** | | |
| | Acute Tox. 4; Eye Irrit. 2A; Carc. 2; STOT SE 3; H302 + H312, H319, H335, H351 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
No data available

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Combustible liquids

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Isophorone | 78-59-1 | C | 5.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Malaise<br>Fatigue<br>Confirmed animal carcinogen with unknown relevance to humans | | |

| | | | | |
|---|---|---|---|---|
| | | TWA | 4.000000 ppm<br>23.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 25.000000 ppm<br>140.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | The value in mg/m3 is approximate. | | |
| | | PEL | 4 ppm<br>23 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: butyl-rubber
Minimum layer thickness: 0.3 mm
Break through time: 480 min
Material tested:Butoject® (KCL 897 / Aldrich Z677647, Size M)

Splash contact
Material: Nature latex/chloroprene
Minimum layer thickness: 0.6 mm
Break through time: 50 min
Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance — Form: liquid, clear
Colour: light yellow

| | | |
|---|---|---|
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -8 °C (18 °F) - lit. |
| f) | Initial boiling point and boiling range | 213 - 214 °C (415 - 417 °F) - lit. |
| g) | Flash point | 96.0 °C (204.8 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 3.8 %(V)<br>Lower explosion limit: 0.8 %(V) |
| k) | Vapour pressure | 1.3 hPa (1.0 mmHg) at 38.0 °C (100.4 °F)<br>0.3 hPa (0.2 mmHg) at 20.0 °C (68.0 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 0.923 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | 462.0 °C (863.6 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents, Strong acids, Strong bases

**10.6 Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - 1,870 mg/kg

LC50 Inhalation - Guinea pig - 8 h - 4600 ppm

LD50 Dermal - Rabbit - 1,382 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Mild skin irritation - 24 h

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Eye irritation - 24 h

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

| | |
|---|---|
| IARC: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: GW7700000

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Central nervous system depression, narcosis

Central nervous system -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | NOEC - Cyprinodon variegatus (sheepshead minnow) - 170 mg/l - 96 h |
| | LC50 - Pimephales promelas (fathead minnow) - 145 mg/l - 96 h |
| Toxicity to daphnia and other aquatic invertebrates | LC50 - Daphnia magna (Water flea) - 120 mg/l - 48 h |

**12.2 Persistence and degradability**

**12.3 Bioaccumulative potential**

| | |
|---|---|
| Bioaccumulation | Lepomis macrochirus (Bluegill) - 14 d<br>- 0.0924 mg/l |
| | Bioconcentration factor (BCF): 7 |

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

No data available

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**

UN number: 3082 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Isophorone)

Reportable Quantity (RQ): 5000 lbs

Poison Inhalation Hazard: No

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

## 15. REGULATORY INFORMATION

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Isophorone | 78-59-1 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Isophorone | 78-59-1 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Isophorone | 78-59-1 | 1993-04-24 |

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Carc. | Carcinogenicity |
| Eye Irrit. | Eye irritation |
| H302 | Harmful if swallowed. |
| H302 + H312 | Harmful if swallowed or in contact with skin |
| H312 | Harmful in contact with skin. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 1 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 1 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.5 Revision Date: 06/02/2016 Print Date: 11/14/2016

# SAFETY DATA SHEET

Version 4.7
Revision Date 12/29/2015
Print Date 02/07/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Lead

Product Number : 391352
Brand : Aldrich

CAS-No. : 7439-92-1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 4), H302
Carcinogenicity (Category 2), H351
Reproductive toxicity (Category 2), H361
Specific target organ toxicity - repeated exposure (Category 2), H373
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)
H302 Harmful if swallowed.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and

| | |
|---|---|
| | understood. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P312 + P330 | IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | Pb |
| Molecular weight | : | 207.20 g/mol |
| CAS-No. | : | 7439-92-1 |
| EC-No. | : | 231-100-4 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Lead** | | |
| | Acute Tox. 4; Carc. 2; Repr. 2; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H302, H351, H361, H373, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Lead oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| | Remarks | See 1910.1025 | | |
| Lead | 7439-92-1 | TWA | 0.05 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Confirmed animal carcinogen with unknown relevance to humans | | |
| | | TWA | 0.05 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Hematologic effects<br>Peripheral Nervous System impairment<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Confirmed animal carcinogen with unknown relevance to humans | | |

| | | | | |
|---|---|---|---|---|
| | | TWA | 0.05 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | See Appendix C | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| Lead | 7439-92-1 | Lead | 30µg/ 100 ml | In blood | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | Not critical | | | |
| | | Lead | 30µg/ 100 ml | In blood | ACGIH - Biological Exposure Indices (BEI) |
| | | Not critical | | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: powder |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 327.4 °C (621.3 °F) - lit. |
| f) | Initial boiling point and boiling range | 1,740 °C (3,164 °F) - lit. |
| g) | Flash point | Not applicable |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong acids

### 10.6 Hazardous decomposition products

Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
No data available

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**

Rat
Cytogenetic analysis

**Carcinogenicity**

Limited evidence of carcinogenicity in animal studies

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (Lead) |
| NTP: | Reasonably anticipated to be a human carcinogen (Lead) |
| | Reasonably anticipated to be a human carcinogenThe reference note has been added by TD based on the background information of the NTP. (Lead) |
| OSHA: | 1910.1025 (Lead) |
| | OSHA specifically regulated carcinogen (Lead) |

**Reproductive toxicity**
Suspected human reproductive toxicant

Reproductive toxicity - Rat - Inhalation
Effects on Newborn: Biochemical and metabolic.

Reproductive toxicity - Rat - Oral
Effects on Newborn: Behavioral.

Reproductive toxicity - Mouse - Oral
Effects on Fertility: Female fertility index (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated ). Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea).

Developmental Toxicity - Rat - Inhalation
Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Blood and lymphatic system (including spleen and marrow).

Developmental Toxicity - Rat - Oral
Specific Developmental Abnormalities: Blood and lymphatic system (including spleen and marrow). Effects on Newborn: Growth statistics (e.g., reduced weight gain).

Developmental Toxicity - Rat - Oral
Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Effects on Embryo or Fetus: Fetal death.

Developmental Toxicity - Mouse - Oral
Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Effects on Embryo or Fetus: Fetal death.

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**
No data available

**Additional Information**
RTECS: OF7525000

anemia

Stomach - Irregularities - Based on Human Evidence
Stomach - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | mortality LOEC - Oncorhynchus mykiss (rainbow trout) - 1.19 mg/l - 96.0 h |
| | LC50 - Micropterus dolomieui - 2.2 mg/l - 96.0 h |
| | mortality NOEC - Salvelinus fontinalis - 1.7 mg/l - 10.0 d |
| Toxicity to daphnia and other aquatic invertebrates | mortality LOEC - Daphnia (water flea) - 0.17 mg/l - 24 h |
| | mortality NOEC - Daphnia (water flea) - 0.099 mg/l - 24 h |
| Toxicity to algae | mortality EC50 - Skeletonema costatum - 7.94 mg/l - 10 d |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
Bioaccumulation: Oncorhynchus kisutch - 2 Weeks - 150 µg/l

Bioconcentration factor (BCF): 12

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Lead)
Reportable Quantity (RQ): 10 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Lead)
Marine pollutant:yes
**IATA**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Lead)

**Further information**
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Lead | 7439-92-1 | 1994-04-01 |

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Lead | 7439-92-1 | 1994-04-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Lead | 7439-92-1 | 1994-04-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Lead | 7439-92-1 | 1994-04-01 |

**California Prop. 65 Components**

| | | |
|---|---|---|
| WARNING! This product contains a chemical known to the State of California to cause cancer. Lead | CAS-No. 7439-92-1 | Revision Date 1989-07-10 |
| WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Lead | CAS-No. 7439-92-1 | Revision Date 1989-07-10 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H302 | Harmful if swallowed. |
| H351 | Suspected of causing cancer. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

| | |
|---|---|
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 1 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 1 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.7 Revision Date: 12/29/2015 Print Date: 02/07/2016

# SAFETY DATA SHEET

Version 5.7
Revision Date 05/27/2015
Print Date 02/23/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Lindane

Product Number : 233390
Brand : Aldrich
Index-No. : 602-043-00-6

CAS-No. : 58-89-9

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Carcinogenicity (Category 2), H351
Effects on or via lactation, H362
Specific target organ toxicity - repeated exposure (Category 2), H373
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

| | |
|---|---|
| H301 | Toxic if swallowed. |
| H312 + H332 | Harmful in contact with skin or if inhaled |
| H351 | Suspected of causing cancer. |
| H362 | May cause harm to breast-fed children. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. |
| P263 | Avoid contact during pregnancy/ while nursing. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. |
| P302 + P352 + P312 | IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| | | |
|---|---|---|
| Synonyms | : | 1α,2α,3β,4α,5α,6β-Hexachlorocyclohexane<br>γ-BHC |
| Formula | : | $C_6H_6Cl_6$ |
| Molecular weight | : | 290.83 g/mol |
| CAS-No. | : | 58-89-9 |
| EC-No. | : | 200-401-2 |
| Index-No. | : | 602-043-00-6 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **γ-1,2,3,4,5,6-Hexachlorocyclohexane** | | |
| | Acute Tox. 3; Acute Tox. 4; Carc. 2; Lact. ; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H301, H312 + H332, H351, H362, H373, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| γ-1,2,3,4,5,6-Hexachlorocyclohexane | 58-89-9 | TWA | 0.500000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Central Nervous System impairment<br>Liver damage<br>Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |
| | | TWA | 0.500000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential for dermal absorption | | |
| | | TWA | 0.500000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Skin designation | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 113 - 115 °C (235 - 239 °F) - lit. |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 1.85 g/cm3 |
| n) | Water solubility | 8.35 g/l at 25 °C (77 °F) |
| o) | Partition coefficient: n-octanol/water | Pow: 3.5 at 22 °C (72 °F) |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - 88.0 mg/kg

LC50 Inhalation - Rat - 4 h - 1,560 mg/m3

Dermal: No data available

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: No skin irritation

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: No eye irritation

**Respiratory or skin sensitisation**
Will not occur

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (γ-1,2,3,4,5,6-Hexachlorocyclohexane) |
| NTP: | Reasonably anticipated to be a human carcinogenThe reference note has been added by TD based on the background information of the NTP. (γ-1,2,3,4,5,6-Hexachlorocyclohexane) |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
Effects on or via lactation

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: GV4900000

Neurotoxic effects., Cyanosis, Headache, Nausea, Incoordination., Tremors, Vomiting, Dizziness, Seizures., Unconsciousness

Reproductive system. - Irregularities - Based on Human Evidence
Reproductive system. - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Cyprinus carpio (Carp) - 0.2 mg/l - 96.0 h |
| | LC50 - Cyprinodon variegatus (sheepshead minnow) - 0.9 - 1.3 mg/l - 96.0 h |
| | LC50 - Oncorhynchus mykiss (rainbow trout) - 0.03 - 0.28 mg/l - 48.0 h |
| | NOEC - Oncorhynchus mykiss (rainbow trout) - 0.056 mg/l - 3.0 d |
| | LC50 - Oncorhynchus mykiss (rainbow trout) - 0.038 mg/l - 96.0 h |

| | |
|---|---|
| | LOEC - Oncorhynchus mykiss (rainbow trout) - 0.1 mg/l - 3.0 d |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 0.80 - 6.50 mg/l - 48 h |
| | LOEC - Daphnia (water flea) - 0.021 mg/l - 7 d |
| Toxicity to algae | EC50 - Algae - 4.00 mg/l - 72 h |

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**

| | |
|---|---|
| Bioaccumulation | Pimephales promelas (fathead minnow) - 304 d - 0.0091 mg/l |
| | Bioconcentration factor (BCF): 674 |

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
Very toxic to aquatic life with long lasting effects.
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solids, organic, n.o.s. (γ-1,2,3,4,5,6-Hexachlorocyclohexane)
Reportable Quantity (RQ): 1 lbs
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (γ-1,2,3,4,5,6-Hexachlorocyclohexane)
Marine pollutant:yes

**IATA**
UN number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solid, organic, n.o.s. (γ-1,2,3,4,5,6-Hexachlorocyclohexane)

## 15. REGULATORY INFORMATION

**SARA 302 Components**
The following components are subject to reporting levels established by SARA Title III, Section 302:

| | CAS-No. | Revision Date |
|---|---|---|
| γ-1,2,3,4,5,6-Hexachlorocyclohexane | 58-89-9 | 2007-07-01 |

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| γ-1,2,3,4,5,6-Hexachlorocyclohexane | 58-89-9 | 2007-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| γ-1,2,3,4,5,6-Hexachlorocyclohexane | 58-89-9 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| γ-1,2,3,4,5,6-Hexachlorocyclohexane | 58-89-9 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| γ-1,2,3,4,5,6-Hexachlorocyclohexane | 58-89-9 | 2007-07-01 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| γ-1,2,3,4,5,6-Hexachlorocyclohexane | 58-89-9 | 2009-02-01 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H301 | Toxic if swallowed. |
| H312 | Harmful in contact with skin. |
| H312 + H332 | Harmful in contact with skin or if inhaled |
| H332 | Harmful if inhaled. |
| H351 | Suspected of causing cancer. |
| H362 | May cause harm to breast-fed children. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**
Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.7 Revision Date: 05/27/2015 Print Date: 02/23/2016

# SAFETY DATA SHEET

Version 6.6
Revision Date 09/06/2024
Print Date 09/07/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Magnesium

Product Number : 266302
Brand : Sigma-Aldrich
Index-No. : 012-002-00-9
CAS-No. : 7439-95-4

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable solids (Category 1), H228
Self-heating chemicals (Category 1), H251
Chemicals which, in contact with water, emit flammable gases (Category 2), H261



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For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word Danger

Hazard Statements

| | |
|---|---|
| H228 | Flammable solid. |
| H251 | Self-heating; may catch fire. |
| H261 | In contact with water releases flammable gas. |

Precautionary Statements

| | |
|---|---|
| P210 | Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. |
| P223 | Do not allow contact with water. |
| P231 + P232 | Handle under inert gas. Protect from moisture. |
| P235 + P410 | Keep cool. Protect from sunlight. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P335 + P334 | Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P402 + P404 | Store in a dry place. Store in a closed container. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P407 | Maintain air gap between stacks/ pallets. |
| P420 | Store away from other materials. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Combustible dust

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | Mg |
| Molecular weight | : | 24.31 g/mol |
| CAS-No. | : | 7439-95-4 |
| EC-No. | : | 231-104-6 |
| Index-No. | : | 012-002-00-9 |

No components need to be disclosed according to the applicable regulations.

For the full text of the H-Statements mentioned in this Section, see Section 16.



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## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Remove contact lenses.

**If swallowed**
After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Special powder against metal fire Cover with dry sand or cement.

**Unsuitable extinguishing media**
Foam Water

### 5.2 Special hazards arising from the substance or mixture

Magnesium oxide
Not combustible.
May not get in touch with: Water
Ambient fire may liberate hazardous vapours.

### 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

### 5.4 Further information

none



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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up

Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Keep workplace dry. Do not allow product to come into contact with water.

**Advice on protection against fire and explosion**
Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.

**Hygiene measures**
Change contaminated clothing. Wash hands after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Keep away from heat and sources of ignition.
Never allow product to get in contact with water during storage.

**Storage class**
Storage class (TRGS 510): 4.2: Pyrophoric and self-heating hazardous materials

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**
Contains no substances with occupational exposure limit values.



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## 8.2 Exposure controls

### Appropriate engineering controls
Change contaminated clothing. Wash hands after working with substance.

### Personal protective equipment

#### Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

#### Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### Body Protection
Flame retardant antistatic protective clothing.

#### Respiratory protection
Recommended Filter type: Filter type P1
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

#### Control of environmental exposure
Do not let product enter drains. Risk of explosion.



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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: chips |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/ range: 648 °C (1198 °F) - lit. |
| f) | Initial boiling point and boiling range | 1,090 °C 1,994 °F - lit. |
| g) | Flash point | ()No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | May form combustible dust concentrations in air. |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | 1 hPa at 621 °C (1150 °F) |
| l) | Vapor density | No data available |
| m) | Density | 1.74 g/mL at 25 °C (77 °F) - lit. |
| | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Autoignition temperature | The substance or mixture is classified as self heating with the category 1. |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | none |

### 9.2 Other safety information

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Self-heating; may catch fire.



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### 10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions
Risk of ignition or formation of inflammable gases or vapours with:
Oxidizing agents
alkalines
Halogenated hydrocarbon
halogens
Alcohols
nitrates
acids
Water

### 10.4 Conditions to avoid
Exposure to moisture. Exposure to air.
Moisture.

### 10.5 Incompatible materials
No data available

### 10.6 Hazardous decomposition products
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
Oral: No data available
Inhalation: No data available
Dermal: No data available

**Skin corrosion/irritation**
Remarks: No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.



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**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, chills, Fever, fatigue, muscle pain, joint pain, rash, Anorexia.
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Liver - Irregularities - Based on Human Evidence

Liver - Irregularities - Based on Human Evidence

## SECTION 12: Ecological information

### 12.1 Toxicity
No data available

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties
No data available

### 12.7 Other adverse effects
No data available



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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**
UN number: 1869 Class: 4.1 Packing group: III
Proper shipping name: Magnesium
Reportable Quantity (RQ):
Poison Inhalation Hazard: No

**IMDG**
UN number: 1869 Class: 4.1 Packing group: III EMS-No: F-G, S-G
Proper shipping name: MAGNESIUM

**IATA**
UN number: 1869 Class: 4.1 Packing group: III
Proper shipping name: Magnesium

## SECTION 15: Regulatory information

**CERCLA Reportable Quantity**
This material does not contain any components with a CERCLA RQ.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**
This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**
This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Fire Hazard
Reactivity Hazard
Chronic Health Hazard

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations**

**Massachusetts Right To Know**
No components are subject to the Massachusetts Right to Know Act.

**Maine Chemicals of High Concern**



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Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

**Washington Chemicals of High Concern**

Product does not contain any listed chemicals

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16: Other information

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 6.6 Revision Date: 09/06/2024 Print Date: 09/07/2024



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# SAFETY DATA SHEET

Version 4.6
Revision Date 03/02/2015
Print Date 02/07/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Manganese

Product Number : 463728
Brand : Aldrich

CAS-No. : 7439-96-5

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Substances and mixtures, which in contact with water, emit flammable gases (Category 1), H260
Acute aquatic toxicity (Category 3), H402
Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H260 In contact with water releases flammable gases which may ignite spontaneously.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)
P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P231 + P232 Handle under inert gas. Protect from moisture.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P335 + P334 Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages.

| | |
|---|---|
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |
| P402 + P404 | Store in a dry place. Store in a closed container. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | Mn |
| Molecular weight | : | 54.94 g/mol |
| CAS-No. | : | 7439-96-5 |
| EC-No. | : | 231-105-1 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Manganese** | | |
| | Water-react. 1; Aquatic Acute 3; Aquatic Chronic 3; H260, H412 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Dry powder Carbon dioxide (CO2)

**Unsuitable extinguishing media**
Water

**5.2 Special hazards arising from the substance or mixture**
Manganese/manganese oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No smoking.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.
Never allow product to get in contact with water during storage.

Moisture sensitive. Keep in a dry place.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Manganese | 7439-96-5 | TWA | 0.200000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Central Nervous System impairment<br>Adopted values or notations enclosed are those for which changes are proposed in the NIC<br>See Notice of Intended Changes (NIC) | | |
| | | C | 5 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Ceiling limit is to be determined from breathing-zone air samples. | | |
| | | C | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Ceiling limit is to be determined from breathing-zone air samples. | | |

| | | | | |
|---|---|---|---|---|
| | | TWA | 1.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 3.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 1.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 3.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | C | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Ceiling limit is to be determined from breathing-zone air samples. | | |
| | | TWA | 1.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 3.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 0.200000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Adopted values or notations enclosed are those for which changes are proposed in the NIC<br>See Notice of Intended Changes (NIC)<br>varies | | |
| | | TWA | 0.100000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>2014 Adoption<br>varies | | |
| | | TWA | 0.020000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>2014 Adoption<br>varies | | |
| | | TWA | 0.1 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>varies | | |
| | | TWA | 0.02 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>varies | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**
impervious clothing, Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: powder<br>Colour: grey |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 1,244 °C (2,271 °F) - lit. |
| f) | Initial boiling point and boiling range | 1,962 °C (3,564 °F) - lit. |
| g) | Flash point | Not applicable |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 7.3 g/mL at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information
No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity
No data available

### 10.2 Chemical stability
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
Reacts violently with water.

**10.4 Conditions to avoid**
Exposure to moisture

**10.5 Incompatible materials**
acids, Halogens, Bases, Phosphorus, Sulphur oxides, Peroxides

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 9,000 mg/kg

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Mild skin irritation - 24 h

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Mild eye irritation - 24 h

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

Carcinogenicity - Rat - Intramuscular
Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Tumorigenic:Tumors at site or application.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

May cause reproductive disorders.

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: OO9275000

Men exposed to manganese dusts showed a decrease in fertility. Chronic manganese poisoning primarily involves the central nervous system. Early symptoms include languor, sleepiness and weakness in the legs. A stolid mask-like appearance of the face, emotional disturbances such as uncontrollable laughter and a spastic gait with tendency to fall in walking are findings in more advanced cases. High incidence of pneumonia has been found in workers exposed to the dust or fume of some manganese compounds.

Stomach - Irregularities - Based on Human Evidence
Stomach - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 40 mg/l - 48 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life.

No data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3208 Class: 4.3 Packing group: I
Proper shipping name: Metallic substance, water-reactive, n.o.s. (Manganese)

Poison Inhalation Hazard: No

**IMDG**
UN number: 3208 Class: 4.3 Packing group: I EMS-No: F-G, S-N
Proper shipping name: METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S. (Manganese)

**IATA**
UN number: 3208 Class: 4.3 Packing group: I
Proper shipping name: Metallic substance, water-reactive, n.o.s. (Manganese)
IATA Passenger: Not permitted for transport

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Manganese | 7439-96-5 | 2007-07-01 |

**SARA 311/312 Hazards**
Reactivity Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Manganese | 7439-96-5 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Manganese | 7439-96-5 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Manganese | 7439-96-5 | 2007-07-01 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| H260 | In contact with water releases flammable gases which may ignite spontaneously. |
| H402 | Harmful to aquatic life. |
| H412 | Harmful to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Chronic Health Hazard: | * |
| Flammability: | 3 |
| Physical Hazard | 2 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 2 |
| Special hazard.I: | W |

**Further information**
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**Preparation Information**
Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.6 Revision Date: 03/02/2015 Print Date: 02/07/2016

# SAFETY DATA SHEET

Version 6.12
Revision Date 07/27/2024
Print Date 07/28/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : *m*-Cresol

Product Number : W353000
Brand : Aldrich
Index-No. : 604-004-00-9
CAS-No. : 108-39-4

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable liquids (Category 4), H227
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Dermal (Category 3), H311



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Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Short-term (acute) aquatic hazard (Category 2), H401
Long-term (chronic) aquatic hazard (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



| | |
|---|---|
| Signal Word | Danger |
| Hazard Statements | |
| H227 | Combustible liquid. |
| H301 + H311 | Toxic if swallowed or in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H401 | Toxic to aquatic life. |
| H412 | Harmful to aquatic life with long lasting effects. |
| Precautionary Statements | |
| P210 | Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth. |
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 + P310 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. |
| P305 + P351 + P338 + P310 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : 3-Methylphenol



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| | | |
|---|---|---|
| Formula | : | $C_7H_8O$ |
| Molecular weight | : | 108.14 g/mol |
| CAS-No. | : | 108-39-4 |
| EC-No. | : | 203-577-9 |
| Index-No. | : | 604-004-00-9 |

| Component | Classification | Concentration |
|---|---|---|
| **meta-Cresol** | | |
| | Flam. Liq. 4; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Aquatic Acute 2; Aquatic Chronic 3; H227, H301, H311, H314, H318, H401, H412 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Call in physician.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

**If swallowed**
If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible. Do not attempt to neutralise.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available



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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Water Foam Carbon dioxide (CO2) Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides
Combustible.
Vapors are heavier than air and may spread along floors.
Forms explosive mixtures with air on intense heating.
Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.
Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on protection against fire and explosion**
Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.

**Hygiene measures**



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Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Moisture sensitive.

**Storage class**
Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| meta-Cresol | 108-39-4 | TWA | 2.3 ppm<br>10 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 5 ppm<br>22 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | Remarks | Skin designation | | |
| | | TWA | 20 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Not classifiable as a human carcinogen<br>Danger of cutaneous absorption | | |
| | | PEL | 5 ppm<br>22 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
| | | Skin | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.



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**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

**Skin protection**
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: Chloroprene
Minimum layer thickness: 0.65 mm
Break through time: 480 min
Material tested:KCL 720 Camapren®

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: Latex gloves
Minimum layer thickness: 0.6 mm
Break through time: 60 min
Material tested:Lapren® (KCL 706 / Aldrich Z677558, Size M)

**Body Protection**
protective clothing

**Respiratory protection**
Recommended Filter type: Filter A-(P3)
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid<br>Color: colorless, light yellow |
| b) | Odor | phenol-like |



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| | | |
|---|---|---|
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/ range: 8 - 10 °C (46 - 50 °F) - lit. |
| f) | Initial boiling point and boiling range | 203 °C 397 °F - lit. |
| g) | Flash point | 86 °C (187 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 1.35 %(V)<br>Lower explosion limit: 1.06 %(V) |
| k) | Vapor pressure | < 1 hPa at 20 °C (68 °F) |
| l) | Vapor density | 3.73 - (Air = 1.0) |
| m) | Density | 1.034 g/cm3 at 25 °C (77 °F) - lit. |
| | Relative density | 1.0320 °C |
| n) | Water solubility | 22.7 g/l at 25 °C (77 °F) |
| o) | Partition coefficient: n-octanol/water | log Pow: 1.96 - Bioaccumulation is not expected. |
| p) | Autoignition temperature | 559 °C (1038 °F) at 1,013 hPa |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | Not classified as explosive. |
| t) | Oxidizing properties | none |

### 9.2 Other safety information

| | |
|---|---|
| Dissociation constant | 10.09 at 25 °C (77 °F) |
| Relative vapor density | 3.73 - (Air = 1.0) |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Forms explosive mixtures with air on intense heating.
A range from approx. 15 Kelvin below the flash point is to be rated as critical.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .



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### 10.3 Possibility of hazardous reactions
Violent reactions possible with:
Strong oxidizing agents
Nitric acid
fuming sulfuric acid
chlorosulfonic acid
alkalines
Iron
Lead

### 10.4 Conditions to avoid
Strong heating.

### 10.5 Incompatible materials
No data available

### 10.6 Hazardous decomposition products
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - male - 242 mg/kg
(OECD Test Guideline 401)
Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.
Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract
Inhalation: Corrosive to respiratory system.
LD50 Dermal - Rabbit - 620 mg/kg
Remarks: Behavioral:Somnolence (general depressed activity).
Behavioral:Tetany.
(RTECS)

**Skin corrosion/irritation**
Skin - Rabbit
Result: Causes burns. - 24 h
Remarks: (ECHA)
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

**Serious eye damage/eye irritation**
Remarks: Causes serious eye damage.

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
Test Type: Ames test
Test system: Escherichia coli/Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471



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Result: negative
Test Type: Mutagenicity (mammal cell test): chromosome aberration.
Test system: Chinese hamster lung cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: positive
Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Test Type: Chromosome aberration test
Species: Mouse
Cell type: Bone marrow
Application Route: Oral
Method: OECD Test Guideline 475
Result: negative

**Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

## 11.2 Additional Information

Repeated dose toxicity - Rat - male - Oral - 13 Weeks - NOAEL (No observed adverse effect level) - 50 mg/kg

RTECS: GO6125000
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After absorption:

Systemic effects:



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Headache
Nausea
Vomiting
Dizziness
agitation, spasms
respiratory arrest
Unconsciousness

Damage to:

Central nervous system
Liver
Kidney

This substance should be handled with particular care.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | static test LC50 - Salvelinus fontinalis - 7.6 mg/l - 96 h<br>Remarks: (ECHA) |
| | static test LC50 - Oncorhynchus mykiss (rainbow trout) - 8.6 mg/l - 96 h<br>Remarks: (ECHA) |
| | static test LC50 - Salmo trutta (brown trout) - 8.4 mg/l - 96 h<br>Remarks: (ECHA) |
| Toxicity to daphnia and other aquatic invertebrates | flow-through test EC50 - Daphnia pulicaria - > 99.5 mg/l - 48 h<br>(US-EPA) |
| Toxicity to fish(Chronic toxicity) | flow-through test NOEC - Pimephales promelas (fathead minnow) - 1.35 mg/l - 32 d<br>(OECD Test Guideline 210)<br>Remarks: The value is given in analogy to the following substances: p-cresol |
| Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) | semi-static test NOEC - Daphnia magna (Water flea) - 1 mg/l - 21 d<br>Remarks: (ECHA)<br>The value is given in analogy to the following substances: p-cresol |



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### 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 10 d
Result: 96 % - Inherently biodegradable.
(OECD Test Guideline 302B)

### 12.3 Bioaccumulative potential

Bioaccumulation Leuciscus idus (Golden orfe) - 3 d
- 0.05 mg/l(meta-Cresol)

Bioconcentration factor (BCF): 17 - 20

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

Biological effects:
Hazard for drinking water supplies.
Change in the flavour characteristics of fish protein.
Discharge into the environment must be avoided.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**

UN number: 2076 Class: 6.1 (8) Packing group: II
Proper shipping name: Cresols, liquid
Reportable Quantity (RQ): 100 lbs
Reportable Quantity (RQ): 100 lbs
Poison Inhalation Hazard: No

**IMDG**

UN number: 2076 Class: 6.1 (8) Packing group: II EMS-No: F-A, S-B
Proper shipping name: CRESOLS, LIQUID



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**IATA**
UN number: 2076 Class: 6.1 (8) Packing group: II
Proper shipping name: Cresols, liquid

## SECTION 15: Regulatory information

### CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| meta-Cresol | 108-39-4 | 100 | 100 |
| meta-Cresol | 108-39-4 | 100 | 100 (D024) |

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Fire Hazard
Acute Health Hazard
Chronic Health Hazard

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

meta-Cresol 108-39-4 >= 90 - <= 100 %

### Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

meta-Cresol 108-39-4 >= 90 - <= 100 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

meta-Cresol 108-39-4 >= 90 - <= 100 %

### Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

meta-Cresol 108-39-4 >= 90 - <= 100 %

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307
This product does not contain any priority pollutants related to the U.S. Clean Water Act



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**US State Regulations**

**Massachusetts Right To Know**

| | |
|---|---|
| meta-Cresol | 108-39-4 |

**Pennsylvania Right To Know**

| | |
|---|---|
| meta-Cresol | 108-39-4 |

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

**Washington Chemicals of High Concern**

Product does not contain any listed chemicals

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16: Other information

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 6.12 Revision Date: 07/27/2024 Print Date: 07/28/2024



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# SAFETY DATA SHEET

Version 6.5
Revision Date 02/07/2023
Print Date 02/07/2023

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Mercury

Product Number : 215457
Brand : SIGALD
Index-No. : 080-001-00-0
CAS-No. : 7439-97-6

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Scientific research and development, Reagent for analysis

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Acute toxicity, Inhalation (Category 2), H330
Reproductive toxicity (Category 1B), H360
Specific target organ toxicity - repeated exposure (Category 1), H372
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word Danger



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Hazard statement(s)

| | |
|---|---|
| H330 | Fatal if inhaled. |
| H360 | May damage fertility or the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P284 | Wear respiratory protection. |
| P304 + P340 + P310 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | Hg |
| Molecular weight | : | 200.59 g/mol |
| CAS-No. | : | 7439-97-6 |
| EC-No. | : | 231-106-7 |
| Index-No. | : | 080-001-00-0 |

| Component | Classification | Concentration |
|---|---|---|
| **mercury** | | |
| | Acute Tox. 2; Repr. 1B; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H330, H360, H372, H400, H410<br>M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 100 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.



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## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

**If swallowed**
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture
Mercury/mercury oxides.
Not combustible.
Ambient fire may liberate hazardous vapours.

### 5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information
Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.



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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. In some instances, a mercury spill kit may be used. Please consult with your site EHS representative to determine the most appropriate clean up method.Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

**Hygiene measures**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Store under inert gas.

**Storage class**
Storage class (TRGS 510): 6.1B: Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**



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| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| mercury | 7439-97-6 | C | 0.1 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | Remarks | Potential for dermal absorption | | |
| | | CEIL | 1.0mg/10m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | TWA | 0.05 mg/m3 | USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values) |
| | | Skin notation | | |
| | | TWA | 0.025 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Kidney damage<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen<br>Danger of cutaneous absorption | | |
| | | TWA | 0.05 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential for dermal absorption | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L



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**Body Protection**
protective clothing

**Respiratory protection**
required when vapours/aerosols are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid<br>Color: silver, white |
| b) | Odor | odorless |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -38.87 °C (-37.97 °F) - lit. |
| f) | Initial boiling point and boiling range | 356.6 °C 673.9 °F - lit. |
| g) | Flash point | ()Not applicable |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | The product is not flammable. |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | < 0.01 hPa at 20 °C (68 °F)<br>1 hPa at 126 °C(259 °F) |
| l) | Vapor density | 6.93 - (Air = 1.0) |
| m) | Density | 13.55 g/cm3 at 25 °C (77 °F) |
| | Relative density | No data available |
| n) | Water solubility | 0.00006 g/l at 25 °C (77 °F) |
| o) | Partition coefficient: n-octanol/water | Not applicable for inorganic substances |
| p) | Autoignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |



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s) Explosive properties No data available

t) Oxidizing properties none

### 9.2 Other safety information

| | |
|---|---|
| Relative vapor density | 6.93 - (Air = 1.0) |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity
No data available

### 10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions
Risk of explosion with:
Acetylene
Alkali metals
Aluminum
Amines
Ammonia
chlorine dioxide
Potassium
sodium
oxalic acid
perchlorates
Risk of ignition or formation of inflammable gases or vapours with:
Chlorine
silanes
Oxygen
Generates dangerous gases or fumes in contact with:
Nitric acid
Exothermic reaction with:
Bromine
Metals
acetylidene
Oxygen

### 10.4 Conditions to avoid
no information available

### 10.5 Incompatible materials
Aluminum, Lead, Copper, silver, Zinc, zinc alloys, Tin

### 10.6 Hazardous decomposition products
In the event of fire: see section 5



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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
Oral: No data available
LC50 Inhalation - Rat - male - 2 h - < 27 mg/m3 - vapor

Dermal: No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
Presumed human reproductive toxicant

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard**
No data available

### 11.2 Additional Information

RTECS: OV4550000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence



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## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | mortality LC50 - Cyprinus carpio (Carp) - 0.160 mg/l - 96 h |
| Toxicity to fish(Chronic toxicity) | Remarks: No data available (mercury) |

### 12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Carassius auratus (goldfish) - 1,789 d - 0.25 µg/l(mercury) |
| | Bioconcentration factor (BCF): 155,986 |

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

## SECTION 14: Transport information

**DOT (US)**

UN number: 2809 Class: 8 (6.1) Packing group: III
Proper shipping name: Mercury
Reportable Quantity (RQ): 1 lbs
Reportable Quantity (RQ): 1 lbs
Poison Inhalation Hazard: No

**IMDG**

UN number: 2809 Class: 8 (6.1) Packing group: III EMS-No: F-A, S-B
Proper shipping name: MERCURY
Marine pollutant : yes

**IATA**



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UN number: 2809 Class: 8 (6.1) Packing group: III
Proper shipping name: Mercury

## SECTION 15: Regulatory information

**SARA 302 Components**
This material does not contain any components with a section 302 EHS TPQ.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| mercury | 7439-97-6 | 2015-11-23 |

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Reportable Quantity** : D009 lbs

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| mercury | 7439-97-6 | 2015-11-23 |

**California Prop. 65 Components**

| | CAS-No. | Revision Date |
|---|---|---|
| , which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.mercury | 7439-97-6 | 2013-12-20 |

## SECTION 16: Other information

**Further information**
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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# Safety Data Sheet

**Material Name METHYL CHLOROFORM** **SDS ID: MAT14370**

## * * *Section 1 - IDENTIFICATION* * *

**Product Identifier:** METHYL CHLOROFORM

**Trade Names/Synonyms**

MTG MSDS 219; 1,1,1-TRICHLOROETHANE; ALPHA-TRICHLOROETHANE; AEROTHENE TT; METHYLTRICHLOROMETHANE; METHYLCHLOROFORM; TRICHLOROMETHYLMETHANE; TRICHLOROETHANE; ETHANE, 1,1,1-TRICHLOROETHANE; CHLORTEN; 1,1,1-TRICHLORETHANE; UN 2831; C2H3Cl3

**Chemical Family**

halogenated, aliphatic

**Recommended Use**

industrial

**Restrictions on Use**

None known.

**Manufacturer Information**

MATHESON TRI-GAS, INC.
150 Allen Road, Suite 302
Basking Ridge, NJ 07920

General Information: 1-800-416-2505
Emergency #: 1-800-424-9300 (CHEMTREC)
Outside the US: 703-527-3887 (Call collect)

## * * *Section 2 - HAZARDS IDENTIFICATION* * *

**Classification in accordance with 29 CFR 1910.1200**

Acute Toxicity (Inhalation), Category 4
Skin Corrosion / Irritation, Category 2
Eye Damage / Irritation, Category 2A
Toxic to Reproduction, Category 2
Specific Target Organ Toxicity - Single Exposure, Category 1 (central nervous system and heart)
Specific Target Organ Toxicity - Single Exposure, Category 3 (respiratory system)
Specific Target Organ Toxicity - Repeated Exposure, Category 1 (central nervous system, heart, and liver)
Specific Target Organ Toxicity - Repeated Exposure, Category 2 (brain, lungs, and nervous system)
Hazardous to the Aquatic Environment - Acute Hazard, Category 2
Hazardous to the Aquatic Environment - Chronic Hazard, Category 2
Hazardous for the ozone layer, Category 1

**GHS LABEL ELEMENTS**

**Symbol(s)**



**Signal Word**

DANGER

**Hazard Statement(s)**

Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
Suspected of damaging fertility or the unborn child
Causes damage to central nervous system and heart.
May cause respiratory tract irritation.
Causes damage to central nervous system, heart, and liver through prolonged or repeated exposure.
May cause damage to brain, lungs, nervous system through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects
Harms public health and the environment by destroying ozone in the upper atmosphere

**Precautionary Statement(s)**

**Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe vapor or mist. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment.

**Response**

IF exposed: Call a POISON CENTER or doctor/physician. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Collect spillage.

**Storage**

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal**

Dispose of in accordance with applicable regulations.
Refer to manufacturer/supplier for information on recovery/recycling.

## * * *Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS* * *

| CAS | Component | Percent |
|---|---|---|
| 71-55-6 | METHYL CHLOROFORM | 100 |

**Component Related Regulatory Information**

This product may be regulated, have exposure limits or other information identified as the following: Trichloroethane (25323-89-1).

## * * *Section 4 - FIRST AID MEASURES* * *

**Description of Necessary Measures**

**Inhalation**

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.

**Skin**

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

**Eyes**

Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Then get immediate medical attention.

**Ingestion**

If vomiting occurs, keep head lower than hips to help prevent aspiration. If person is unconscious, turn head to side. Get medical attention immediately.

**Most Important Symptoms/Effects**

**Acute**

respiratory tract irritation, skin irritation, eye irritation, central nervous system depression, central nervous system damage, heart damage

**Delayed**

central nervous system damage, heart damage, liver damage, reproductive effects, lung damage, brain damage, nervous system damage

**Indication of Immediate Medical Attention and Special Treatment**

For inhalation, consider oxygen.

## * * *Section 5 - FIRE FIGHTING MEASURES* * *

**Suitable Extinguishing Media**

carbon dioxide, regular dry chemical, water spray

Large fires: Use dry chemical, carbon dioxide, alcohol-resistant foam or water spray.

**Unsuitable Extinguishing Media**

Do not scatter spilled material with high-pressure water streams.

**Specific Hazards Arising from the Chemical**

Slight fire hazard.

**Hazardous Combustion Products**

**Combustion:** hydrogen chloride, phosgene, oxides of carbon

**Fire Fighting Measures**

Move container from fire area if it can be done without risk. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with water spray until well after the fire is out. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Stay away from the ends of tanks. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile).

**Special Protective Equipment and Precautions for Firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

## * * *Section 6 - ACCIDENTAL RELEASE MEASURES* * *

**Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

**Methods and Materials for Containment and Cleaning Up**

Avoid heat, flames, sparks and other sources of ignition. Eliminate all ignition sources if safe to do so. Stop leak if possible without personal risk. **Small spills:** Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. **Large spills:** Dike for later disposal. Remove sources of ignition. Keep unnecessary people away, isolate hazard area and deny entry. Notify Local Emergency Planning Committee and State Emergency Response Commission for release greater than or equal to RQ (U.S. SARA Section 304). If release occurs in the U.S. and is reportable under CERCLA Section 103, notify the National Response Center at (800)424-8802 (USA) or (202)426-2675 (USA).

## * * *Section 7 - HANDLING AND STORAGE* * *

**Precautions for Safe Handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe vapor or mist. Use only outdoors or in a well-ventilated area. Wear protective gloves and eye/face protection. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid release to the environment.

**Conditions for Safe Storage, including any Incompatibilities**

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in a cool, dry place. Keep separated from incompatible substances.

**Incompatibilities** combustible materials, bases, metals, oxidizing materials

## * * *Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION* * *

**Component Exposure Limits**

**METHYL CHLOROFORM (71-55-6)**

| | |
|---|---|
| **ACGIH:** | 350 ppm TWA |
| | 450 ppm STEL |
| **Europe:** | 100 ppm TWA; 555 mg/m3 TWA |
| | 200 ppm STEL; 1110 mg/m3 STEL |
| **OSHA (Final):** | 350 ppm TWA; 1900 mg/m3 TWA |
| **OSHA (Vacated):** | 350 ppm TWA; 1900 mg/m3 TWA |
| | 450 ppm STEL; 2450 mg/m3 STEL |
| **NIOSH:** | 350 ppm Ceiling (15 min); 1900 mg/m3 Ceiling (15 min) |

**Component Biological Limit Values**

**METHYL CHLOROFORM (71-55-6)**

**ACGIH:** 40 ppm Medium: end-exhaled air Time: prior to last shift of workweek Parameter: Methyl chloroform; 10 mg/L Medium: urine Time: end of workweek Parameter: Trichloroacetic acid (nonspecific, semi-quantitative); 30 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Total trichloroethanol (nonspecific, semi-quantitative); 1 mg/L Medium: blood Time: end of shift at end of workweek Parameter: Total trichloroethanol (nonspecific)

**IDLH**

700 ppm

**Appropriate Engineering Controls**

Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

**Individual Protection Measures, such as Personal Protective Equipment**

**Eyes/Face Protection**

Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**Skin Protection**

Wear appropriate chemical resistant clothing.

**Glove Recommendations**

Wear appropriate chemical resistant gloves.

**Respiratory Protection**

The following respirators and maximum use concentrations are drawn from NIOSH and/or OSHA.

700 ppm

Any supplied-air respirator.

Any self-contained breathing apparatus with a full facepiece.
Emergency or planned entry into unknown concentrations or IDLH conditions -
Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.
Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode.
Escape -
Any air-purifying full-facepiece respirator (gas mask) with a chin-style, front-mounted or back-mounted organic vapor canister.
Any appropriate escape-type, self-contained breathing apparatus.

## * * *Section 9 - PHYSICAL AND CHEMICAL PROPERTIES* * *

| | | | |
|---|---|---|---|
| **Physical State:** | Liquid | **Appearance:** | clear, colorless liquid |
| **Color:** | colorless | **Physical Form:** | volatile liquid |
| **Odor:** | sweet odor | **Odor Threshold:** | 44 - 100 ppm |
| **pH:** | Not available | **Melting/Freezing Point:** | -32 °C |
| **Boiling Point:** | 74 °C | **Flash Point:** | >93.3 °C |
| **Decomposition:** | Not available | **Evaporation Rate:** | 5.0 (butyl acetate=1) |
| **LEL:** | 7.5 % | **UEL:** | 12.5 % |
| **Vapor Pressure:** | 100 mmHg @ 20 °C | **Henry's Law Constant:** | 0.072 atm-cu m/mole @ 25°C |
| **Vapor Density (air = 1):** | 4.55 | **Specific Gravity (water=1):** | 1.3390 |
| **Water Solubility:** | 0.078 % @ 25 °C | **Log KOW:** | 2.49 |
| **KOC:** | 17823.79 estimated from water solubility | **Auto Ignition:** | 537 °C |
| **Viscosity:** | 0.858 cP @20 °C | **Volatility:** | 100% |
| **Molecular Weight:** | 133.40 | **Molecular Formula:** | C-H3-C-Cl3 |

**Other Property Information**

No additional information is available.

**Solvent Solubility**

**Soluble:** acetone, benzene, chloroform, methanol, ethanol, carbon disulfide, ether, carbon tetrachloride, heptane

## * * *Section 10 - STABILITY AND REACTIVITY* * *

**Reactivity**

No reactivity hazard is expected.

**Chemical Stability**

Stable at normal temperatures and pressure.

**Possibility of Hazardous Reactions**

Will not polymerize.

**Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition. Containers may rupture or explode if exposed to heat.

**Incompatible Materials**

combustible materials, bases, metals, oxidizing materials

**Hazardous Decomposition**

**Combustion:** hydrogen chloride, phosgene, oxides of carbon

## * * *Section 11 - TOXICOLOGICAL INFORMATION* * *

**Acute and Chronic Toxicity**

**Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

**METHYL CHLOROFORM (71-55-6)**

Dermal LD50 Rabbit >15800 mg/kg; Inhalation LC50 Rat 18000 ppm 4 h; Oral LD50 Rat >2000 mg/kg

**RTECS Acute Toxicity (selected)**

The components of this material have been reviewed, and RTECS publishes the following endpoints:

**METHYL CHLOROFORM (71-55-6)**

**Inhalation:** 24400 mg/m3 Inhalation Cat LC50; 29492 ppm/10 minute(s) Inhalation Mouse LC50; 3911 ppm/2 hour Inhalation Mouse LC50
20000 ppm/2 hour Inhalation Rat LC50; 14250 ppm/7 hour Inhalation Rat LC50; 17000 ppm/4 hour Inhalation Rat LC50

**Acute Toxicity Level**

**METHYL CHLOROFORM (71-55-6)**

**Slightly Toxic:** inhalation, dermal absorption, ingestion

**Information on Likely Routes of Exposure**

**Inhalation**

irritation, changes in blood pressure, nausea, vomiting, diarrhea, difficulty breathing, irregular heartbeat, headache, drowsiness, dizziness, mood swings, loss of coordination, blood disorders, heart disorders, kidney damage, liver damage, convulsions, unconsciousness, coma, heart damage, reproductive effects

**Ingestion**

irritation, nausea, vomiting, diarrhea, stomach pain, irregular heartbeat, headache, drowsiness, dizziness, disorientation, loss of coordination, kidney damage, liver damage, convulsions, unconsciousness, coma, reproductive effects

**Skin Contact**

irritation (possibly severe)

**Eye Contact**

irritation

**Immediate Effects**

respiratory tract irritation, skin irritation, eye irritation, central nervous system depression, central nervous system damage, heart damage

**Delayed Effects**

central nervous system damage, heart damage, liver damage, reproductive effects, brain damage, lung damage, nervous system damage

**Medical Conditions Aggravated by Exposure**

heart or cardiovascular disorders, kidney disorders, liver disorders, skin disorders and allergies

**Irritation/Corrosivity Data**

respiratory tract irritation, skin irritation, eye irritation

**RTECS Irritation**

The components of this material have been reviewed, and RTECS publishes the following endpoints:

**METHYL CHLOROFORM (71-55-6)**

450 ppm/8 hour Eyes Man; 100 mg Eyes Rabbit mild; 2 mg/24 hour Eyes Rabbit severe; 5 gm/12 day(s) intermittent Skin Rabbit mild; 20 mg/24 hour Skin Rabbit moderate

**Local Effects**

**METHYL CHLOROFORM (71-55-6)**

**Irritant:** inhalation, skin, eye

**Target Organs**

**METHYL CHLOROFORM (71-55-6)**

central nervous system

**Respiratory Sensitization**

No data available.

**Dermal Sensitization**

No data available.

**Carcinogenicity**

**Component Carcinogenicity**

**METHYL CHLOROFORM (71-55-6)**

**ACGIH:** A4 - Not Classifiable as a Human Carcinogen

**IARC:** Monograph 71 [1999]; Supplement 7 [1987]; Monograph 20 [1979] (Group 3 (not classifiable))

**RTECS Mutagenic**

The components of this material have been reviewed, and RTECS publishes data for one or more components.

**Reproductive Effects Data**

Available data characterizes this substance as a reproductive hazard.

**RTECS Reproductive Effects**

The components of this material have been reviewed, and RTECS publishes the following endpoints:

**METHYL CHLOROFORM (71-55-6)**

2100 ppm Inhalation Rat TCLo (6 hour, pregnant 1-20 day(s)); 7000 ppm Inhalation Rat TCLo (3 hour, pregnant 13-19 day(s)); 43 mg/kg Oral Rat TDLo (pregnant 1-22 day(s), 21 day(s))

**RTECS Tumorigenic**

The components of this material have been reviewed, and RTECS publishes data for one or more components.

**Additional Data**

Alcohol may enhance the toxic effects. Stimulants such as epinephrine may induce ventricular fibrillation.

**Specific Target Organ Toxicity - Single Exposure**

central nervous system, heart, respiratory system

**Specific Target Organ Toxicity - Repeated Exposure**

central nervous system, heart, liver, brain, lungs, nervous system

**Aspiration Hazard**

Not expected to be an aspiration hazard.

## * * *Section 12 - ECOLOGICAL INFORMATION* * *

**Ecotoxicity**

Toxic to aquatic life with long lasting effects.

**Component Analysis - Aquatic Toxicity**

**METHYL CHLOROFORM (71-55-6)**

**Fish:** 96 Hr LC50 Pimephales promelas: 35.2 - 50.7 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 57 - 90 mg/L [static] (juvenile); 96 Hr LC50 Cyprinus carpio: 56 mg/L [flow-through]; 96 Hr LC50 Poecilia reticulata: 52.9 mg/L [flow-through]; 96 Hr LC50 Poecilia reticulata: 69.7 mg/L [static]; 96 Hr LC50 Pimephales promelas: 91 - 126 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 46 - 59 mg/L [static]

**Algae:** 96 Hr EC50 Pseudokirchneriella subcapitata: >500 mg/L

**Invertebrate:** 48 Hr LC50 Daphnia magna: >530 mg/L; 48 Hr EC50 Daphnia magna: 2384 mg/L; 48 Hr EC50 Daphnia magna: 9.7 - 12.8 mg/L [Static]

**Persistence and Degradability**

This material may biodegrade in soil and water.

**Bioaccumulative Potential**

Bioconcentration potential in aquatic organisms is low based on BCF value of 0.7-4.9.

**Mobility**

Expected to have high mobility in soil.

## * * *Section 13 - DISPOSAL CONSIDERATIONS* * *

**Disposal Methods**

Dispose in accordance with all applicable regulations.

**Component Waste Numbers**

**METHYL CHLOROFORM (71-55-6)**

**RCRA:** waste number U226

## * * *Section 14 - TRANSPORT INFORMATION* * *

**US DOT Information**

**Shipping Name:** 1,1,1-Trichloroethane
**UN/NA #:** UN2831 **Hazard Class:** 6.1 **Packing Group:** III
**Required Label(s):** 6.1

**IMDG Information**

**Shipping Name:** 1,1,1-Trichloroethane
**UN #:** UN2831 **Hazard Class:** 6.1 **Packing Group:** III
**Required Label(s):** 6.1

## * * *Section 15 - REGULATORY INFORMATION* * *

**Component Analysis**

**U.S. Federal Regulations**

This material contains one or more of the following chemicals required to be identified under SARA Section 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

**METHYL CHLOROFORM (71-55-6)**

**SARA 313:** 1.0 % de minimis concentration

**CERCLA:** 1000 lb final RQ; 454 kg final RQ

**SARA 311/312 Hazardous Categories**

**Acute Health:** Yes **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactive:** No

**U.S. State Regulations**

The following components appear on one or more of the following state hazardous substances lists:

| Component | CAS | CA | MA | MN | NJ | PA |
|---|---|---|---|---|---|---|
| METHYL CHLOROFORM | 71-55-6 | Yes | Yes | Yes | Yes | Yes |

Not regulated under California Proposition 65

**Component Analysis - Inventory**

| Component | CAS | US | CA | EU | AU | PH | JP | KR | CN | NZ |
|---|---|---|---|---|---|---|---|---|---|---|
| METHYL CHLOROFORM | 71-55-6 | Yes | DSL | EIN | Yes | Yes | Yes | Yes | Yes | Yes |

## * * *Section 16 - OTHER INFORMATION* * *

**NFPA Ratings: Health:** 2 **Fire:** 1 **Reactivity:** 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**Key / Legend**

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

**Other Information**

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End of Sheet MAT14370

# Methylcyclohexane

Version 1.5 Revision Date 2014-03-20

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

**Product information**

Trade name : Methylcyclohexane
Material : 1098852, 1021714, 1021712, 1028351, 1021711, 1024851, 1028352, 1024850, 1021713

**EC-No.Registration number**

| Chemical Name | CAS-No.<br>EC-No.<br>Index No. | Legal Entity<br>Registration number |
|---|---|---|
| Methylcyclohexane | 108-87-2<br>203-624-3<br>601-018-00-7 | 01-2119556887-18-XXXX |

Relevant Identified Uses Supported : Solvent in other applications
Use in polymer processing – professional, Solvent
Use in coatings – professional, Solvent
Lubricants - Professional, Solvent
Use as a cleaning agent – professional, Solvent
Solvent in other applications- Professional

**Company** : Chevron Phillips Chemical Company LP
Specialty Chemicals
10001 Six Pines Drive
The Woodlands, TX 77380

Local : Chevron Phillips Chemicals International N.V.
Brusselsesteenweg 355
B-3090 Overijse
Belgium

MSDS Requests: (800) 852-5530
Technical Information: (832) 813-4862
Responsible Party: Product Safety Group
Email:msds@cpchem.com

**Emergency telephone:**

**Health**:
866.442.9628 (North America)
1.832.813.4984 (International)
**Transport**:
North America: CHEMTREC 800.424.9300 or 703.527.3887

Asia: +800 CHEMCALL (+800 2436 2255)
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

| | | |
|---|---|---|
| Responsible Department | : | Product Safety and Toxicology Group |
| E-mail address | : | MSDS@CPChem.com |
| Website | : | www.CPChem.com |

## SECTION 2: Hazards identification

**Classification of the substance or mixture**
**REGULATION (EC) No 1272/2008**

| | |
|---|---|
| Aspiration hazard, Category 1 | H304:<br>May be fatal if swallowed and enters airways. |
| Skin irritation, Category 2 | H315:<br>Causes skin irritation. |
| Flammable liquids, Category 2 | H225:<br>Highly flammable liquid and vapor. |
| Specific target organ systemic toxicity - single exposure, Category 3 , Central nervous system | H336:<br>May cause drowsiness or dizziness. |
| Acute toxicity, Category 1 | H400:<br>Very toxic to aquatic life. |
| Chronic aquatic toxicity, Category 2 | H411:<br>Toxic to aquatic life with long lasting effects. |

**Classification (67/548/EEC, 1999/45/EC)**

| | |
|---|---|
| Highly flammable | R11:<br>Highly flammable. |
| Harmful | R65:<br>Harmful: may cause lung damage if swallowed. |
| Irritant | R38:<br>Irritating to skin. |
| Dangerous for the environment | R51/53:<br>Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.<br>R67:<br>Vapors may cause drowsiness and dizziness. |

**Label elements**

**Labeling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



Signal Word : Danger

| | | |
|---|---|---|
| Hazard Statements | : | H225 Highly flammable liquid and vapor.<br>H304 May be fatal if swallowed and enters airways.<br>H315 Causes skin irritation.<br>H336 May cause drowsiness or dizziness.<br>H411 Toxic to aquatic life with long lasting effects. |
| Precautionary Statements | : | **Prevention:** |

| | |
|---|---|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. - No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P243 | Take precautionary measures against static discharge. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |

## SECTION 3: Composition/information on ingredients

Synonyms : Cyclohexylmethane
Hexahydrotoluene
MCH
Methylcyclohexane (Pure Grade)

Molecular formula : C7H14

**Mixtures**

**Hazardous ingredients**

| Chemical Name | CAS-No.<br>EC-No.<br>Index No. | Classification (67/548/EEC) | Classification (REGULATION (EC) No 1272/2008) | Concentration [wt%] |
|---|---|---|---|---|
| Methylcyclohexane | 108-87-2<br>203-624-3<br>601-018-00-7 | F; R11<br>Xn; R65<br>Xi; R38<br>R67<br>N; R51-R53 | Asp. Tox. 1; H304<br>Skin Irrit. 2; H315<br>Flam. Liq. 2; H225<br>STOT SE 3; H336<br>Aquatic Acute 1; H400<br>Aquatic Chronic 2; H411 | 99,8 - 100 |

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

If inhaled : Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.

In case of skin contact : If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Flush eyes with water as a precaution. Remove contact

| | | |
|---|---|---|
| | | lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. |
| If swallowed | : | Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital. |

## SECTION 5: Firefighting measures

| | | |
|---|---|---|
| Flash point | : | -5,5 °C (22,1 °F)<br>Method: Tagliabue Open Cup |
| Autoignition temperature | : | 285 °C (545 °F) |
| Suitable extinguishing media | : | Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical. |
| Unsuitable extinguishing media | : | High volume water jet. |
| Specific hazards during fire fighting | : | Do not allow run-off from fire fighting to enter drains or water courses. |
| Special protective equipment for fire-fighters | : | Wear self contained breathing apparatus for fire fighting if necessary. |
| Further information | : | Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers. |
| Fire and explosion protection | : | Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. |
| Hazardous decomposition products | : | Hydrocarbons. Carbon oxides. |

## SECTION 6: Accidental release measures

| | | |
|---|---|---|
| Personal precautions | : | Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. |
| Environmental precautions | : | Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods for cleaning up | : | Contain spillage, and then collect with non-combustible |

absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

## SECTION 7: Handling and storage

### Handling

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

### Storage

Requirements for storage areas and containers : No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

## SECTION 8: Exposure controls/personal protection

### Ingredients with workplace control parameters

**SK**

| Súčast | Podstata | Hodnota | Kontrolné parametre | Poznámka |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | SK OEL | NPEL priemerný | 200 ppm, 810 mg/m3 | |
| | SK OEL | NPEL krátkodobý | 400 ppm, 1.620 mg/m3 | |

**SI**

| Komponente | Osnova | Vrednost | Parametri nadzora | Pripomba |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | SI OEL | MV | 500 ppm, 2.000 mg/m3 | |

**PT**

| Componentes | Bases | Valor | Parâmetros de controlo | Nota |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | PT OEL | VLE-MP | 400 ppm, | |

**PL**

| Składniki | Podstawa | Wartość | Parametry dotyczące kontroli | Uwaga |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | PL NDS | NDS | 1.600 mg/m3 | |
| | PL NDS | NDSch | 3.000 mg/m3 | |

**NO**

| Komponenter | Grunnlag | Verdi | Kontrollparametere | Nota |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | AN 361 | TWA | 200 ppm, 800 mg/m3 | |

**LT**

| Komponentai | Pagrindas, bazė | Vertė | Kontrolės parametrai | Pastaba |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | LT OEL | IPRD | 50 mg/m3 | |

**IE**

| Ingredients | Basis | Value | Control parameters | Note |
|---|---|---|---|---|
| Methylcyclohexane | IE OEL | OELV - 8 hrs (TWA) | 400 ppm, 1.600 mg/m3 | |

**GR**

| Συστατικά | Βάση | Τιμή | Παράμετροι ελέγχου | Σημείωση |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | GR OEL | TWA | 500 ppm, 2.000 mg/m3 | |
| | GR OEL | STEL | 500 ppm, 2.000 mg/m3 | |

**FR**

| Composants | Base | Valeur | Paramètres de contrôle | Note |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | FR VLE | VME | 400 ppm, 1.600 mg/m3 | normal, |

normal Valeurs limites indicatives

**FI**

| Aineosat | Peruste | Arvo | Valvontaa koskevat muuttujat | Huomautus |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | FI OEL | HTP-arvot 8h | 400 ppm, 1.600 mg/m3 | |
| | FI OEL | HTP-arvot 15 min | 500 ppm, 2.000 mg/m3 | |

**ES**

| Componentes | Base | Valor | Parámetros de control | Nota |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | ES VLA | VLA-ED | 400 ppm, 1.630 mg/m3 | |

**EE**

| Komponendid, osad | Alused | Väärtus | Kontrolliparameetrid | Märkused |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | EE OEL | Piirnorm | 400 ppm, 1.600 mg/m3 | |

**DK**

| Komponenter | Basis | Værdi | Kontrolparametre | Note |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | DK OEL | GV | 200 ppm, 805 mg/m3 | |

**DE**

| Inhaltsstoffe | Grundlage | Wert | Zu überwachende Parameter | Bemerkung |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | DE TRGS 900 | AGW | 200 ppm, 810 mg/m3 | DFG, |

DFG Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission)

**CZ**

| Složky | Základ | Hodnota | Kontrolní parametry | Poznámka |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | CZ OEL | PEL | 1.500 mg/m3 | I, |
| | CZ OEL | NPK-P | 2.000 mg/m3 | I, |

I dráždí sliznice (oči, dýchací cesty) resp. kůži

**CH**

| Inhaltsstoffe | Grundlage | Wert | Zu überwachende Parameter | Bemerkung |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | CH SUVA | MAK-wert | 400 ppm, 1.600 mg/m3 | |
| | CH SUVA | STEL | 800 ppm, 3.200 mg/m3 | |

**BE**

| Bestanddelen | Basis | Waarde | Controleparameters | Opmerking |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | BE OEL | TGG 8 hr | 400 ppm, 1.633 mg/m3 | |

**AT**

| Inhaltsstoffe | Grundlage | Wert | Zu überwachende Parameter | Bemerkung |
|---|---|---|---|---|
| METHYLCYCLOHEXANE | AT OEL | TMW | 400 ppm, 1.600 mg/m3 | |
| | AT OEL | KZW | 1.600 ppm, 6.400 mg/m3 | |

DNEL : End Use: Workers
Routes of exposure: Inhalation
Potential health effects: Systemic effects
Value: 64,3 mg/m3

DNEL : End Use: Workers
Routes of exposure: Inhalation
Potential health effects: Acute effects
Value: 1354,6 mg/m3

| | | |
|---|---|---|
| DNEL | : | End Use: Workers<br>Routes of exposure: Skin contact<br>Potential health effects: Systemic effects<br>Value: 1,7 mg/kg |
| PNEC | : | Fresh water<br>Value: 0,00326 mg/l |
| PNEC | : | Marine water<br>Value: 0,000326 mg/l |
| PNEC | : | Fresh water sediment<br>Value: 0,088 mg/kg |
| PNEC | : | Marine sediment<br>Value: 0,0088 mg/kg |
| PNEC | : | Soil<br>Value: 0,127 mg/kg |

**Engineering measures**

Adequate ventilation to control airborned concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal protective equipment**

| | | |
|---|---|---|
| Respiratory protection | : | Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as:. Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection. |
| Hand protection | : | The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. |
| Eye protection | : | Eye wash bottle with pure water. Tightly fitting safety goggles. |
| Skin and body protection | : | Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate:. Flame retardant |

protective clothing. Footwear protecting against chemicals.

Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

For additional details, see the Exposure Scenario in the Annex portion

## SECTION 9: Physical and chemical properties

### Information on basic physical and chemical properties

**Appearance**

| | | |
|---|---|---|
| Form | : | Liquid |
| Physical state | : | Liquid |
| Color | : | Colorless |
| Odor | : | Mild |

**Safety data**

| | | |
|---|---|---|
| Flash point | : | -5,5 °C (22,1 °F)<br>Method: Tagliabue Open Cup |
| Lower explosion limit | : | 1,2 %(V) |
| Upper explosion limit | : | 6,7 %(V) |
| Oxidizing properties | : | no |
| Autoignition temperature | : | 285 °C (545 °F) |
| Molecular formula | : | C7H14 |
| Molecular weight | : | 98,21 g/mol |
| pH | : | No data available |
| Freezing point | : | -127 °C (-197 °F) |
| Boiling point/boiling range | : | 100,4 °C (212,7 °F) |
| Vapor pressure | : | 1,60 PSI<br>at 37,8 °C (100,0 °F) |
| Relative density | : | 0,774, 15,6 °C(60,1 °F) |
| Density | : | 771,7 g/l |
| Water solubility | : | Negligible |
| Viscosity, dynamic | : | 0,732 cP |
| Relative vapor density | : | 3<br>(Air = 1.0) |
| Evaporation rate | : | 1 |
| Percent volatile | : | > 99 % |

## SECTION 10: Stability and reactivity

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Possibility of hazardous reactions**

Conditions to avoid : Heat, flames and sparks.

Materials to avoid : May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Other data : No decomposition if stored and applied as directed.

## SECTION 11: Toxicological information

**Acute oral toxicity**

Methylcyclohexane : LD50: 4.000 - 4.500 mg/kg
Species: rabbit

**Acute inhalation toxicity**

Methylcyclohexane : LC50: > 26,3 mg/l
Exposure time: 1 h
Species: mouse
Test atmosphere: vapor

**Acute dermal toxicity**

Methylcyclohexane : LD50: > 2.000 mg/kg
Species: rabbit
Method: OECD Test Guideline 402
Information given is based on data obtained from similar substances.

**Skin irritation**

Methylcyclohexane : Skin irritation

**Eye irritation**

Methylcyclohexane : No eye irritation

**Sensitization**

Methylcyclohexane : Did not cause sensitization on laboratory animals.

**Repeated dose toxicity**

Methylcyclohexane : Species: rat, male
Sex: male
Application Route: oral gavage

Dose: 62.5, 250, 1000 mg/kg
Exposure time: 28 d
Number of exposures: daily, 7d/wk
NOEL: 250 mg/kg
Lowest observable effect level: 1.000 mg/kg
Method: OECD Guideline 422

Species: rat, female
Sex: female
Application Route: oral gavage
Dose: 62.5, 250, 1000 mg/kg
Exposure time: 46 d
Number of exposures: daily, 7 d/wk
NOEL: 250 mg/kg
Lowest observable effect level: 1.000 mg/kg
Method: OECD Guideline 422

**Reproductive toxicity**

Methylcyclohexane : Species: rat
Sex: male
Application Route: oral gavage
Dose: 62.5, 250, 1000 mg/kg
Number of exposures: daily, 7 d/wk
Test period: 28
Method: OECD Guideline 422
NOAEL Parent: 1.000 mg/kg
NOAEL F1: 1.000 mg/kg

Species: rat
Sex: female
Application Route: oral gavage
Dose: 62.5, 250, 1000 mg/kg
Number of exposures: daily, 7 d/wk
Test period: 46
Method: OECD Guideline 422
NOAEL Parent: 1.000 mg/kg
NOAEL F1: 1.000 mg/kg

Species: rat
Sex: male and female
Application Route: inhalation (vapor)
Dose: 500, 2000, 7000 ppm
Number of exposures: daily, 7 d/wk
Test period: 28
Method: OECD Test Guideline 416
NOAEL Parent: 500 ppm
NOAEL F1: 500 ppm
NOAEL F2: 2000 ppm
Information given is based on data obtained from similar substances.

**Developmental Toxicity**

Methylcyclohexane : Species: rat
Application Route: Inhalation
Dose: 500, 2000, 7000 ppm
Number of exposures: 6 hr/d, 7 d/wk
Test period: GD 7 - 16

Method: OECD Guideline 414
NOAEL Teratogenicity: 7000 ppm
NOAEL Maternal: 500 ppm
Information given is based on data obtained from similar substances.

Species: rabbit
Application Route: Inhalation
Dose: 500, 2000, 7000 ppm
Number of exposures: 6 hr/d, 7 d/wk
Test period: GD 6 - 18
Method: OECD Guideline 414
NOAEL Teratogenicity: 7000 ppm
NOAEL Maternal: 500 ppm
Information given is based on data obtained from similar substances.

**Methylcyclohexane**
**Aspiration toxicity** : May be fatal if swallowed and enters airways.

**CMR effects**

Methylcyclohexane : Carcinogenicity: Not available
Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Teratogenicity: Animal testing did not show any effects on fetal development.
Reproductive toxicity: Animal testing did not show any effects on fertility.

**Methylcyclohexane**
**Further information** : Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

## SECTION 12: Ecological information

**Toxicity to fish**

Methylcyclohexane : LC50: 2,07 mg/l
Exposure time: 96 h
Species: Fish
semi-static test

**Toxicity to daphnia and other aquatic invertebrates**

Methylcyclohexane : EC50: 0,326 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
semi-static test

**Toxicity to algae**

Methylcyclohexane : ErC50: 0,336 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)

static test

**Toxicity to bacteria**

Methylcyclohexane : IC50: 29 mg/l
Exposure time: 15 h
Growth inhibition

Biodegradability

Methylcyclohexane : aerobic
0 %
Testing period: 28 d
Method: OECD Test Guideline 301F

**Acute aquatic toxicity**

Methylcyclohexane : Very toxic to aquatic life.

Chronic aquatic toxicity

Methylcyclohexane : Toxic to aquatic life with long lasting effects.

Toxicity Data on Soil

Methylcyclohexane : No data available

Other organisms relevant to the environment

Methylcyclohexane : No data available

Impact on Sewage Treatment

Methylcyclohexane : No data available

**Results of PBT assessment**

Methylcyclohexane : Non-classified PBT substance, Non-classified vPvB substance

Additional ecological information : Toxic to aquatic life with long lasting effects.

## SECTION 13: Disposal considerations

The information in this MSDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

| | | |
|---|---|---|
| Product | : | The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. |
| Contaminated packaging | : | Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum. |

For additional details, see the Exposure Scenario in the Annex portion

## SECTION 14: Transport information

**The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).**

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the MSDS and the bill of lading.

**US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)**
UN2296, METHYLCYCLOHEXANE, 3, II

**IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)**
UN2296, METHYLCYCLOHEXANE, 3, II, (-5,5 °C), MARINE POLLUTANT, (METHYLCYCLOHEXANE)

**IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)**
UN2296, METHYLCYCLOHEXANE, 3, II

**ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))**
UN2296, METHYLCYCLOHEXANE, 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS, (METHYLCYCLOHEXANE)

**RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))**
UN2296, METHYLCYCLOHEXANE, 3, II, ENVIRONMENTALLY HAZARDOUS, (METHYLCYCLOHEXANE)

**ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)**
UN2296, METHYLCYCLOHEXANE, 3, II, ENVIRONMENTALLY HAZARDOUS, (METHYLCYCLOHEXANE)

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

| | | |
|---|---|---|
| **Other information** | **:** | **Methylcyclohexane, S.T. 2, Cat. Y** |

## SECTION 15: Regulatory information

**National legislation**

**Chemical Safety Assessment**

**Ingredients** : methylcyclohexane 203-624-3

**Major Accident Hazard Legislation** : 96/82/EC Update: 2003
Dangerous for the environment
9b
Quantity 1: 200 t
Quantity 2: 500 t

: 96/82/EC Update: 2003
Highly flammable
7b
Quantity 1: 5.000 t
Quantity 2: 50.000 t

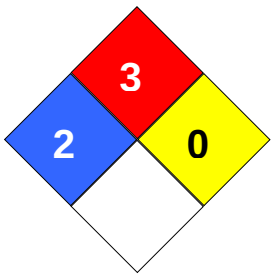
**Water contaminating class (Germany)** : WGK 2 water endangering

**Notification status**

| | | |
|---|---|---|
| Europe REACH | : | On the inventory, or in compliance with the inventory |
| United States of America TSCA | : | On the inventory, or in compliance with the inventory |
| Canada DSL | : | On the inventory, or in compliance with the inventory |
| Australia AICS | : | On the inventory, or in compliance with the inventory |
| New Zealand NZIoC | : | On the inventory, or in compliance with the inventory |
| Japan ENCS | : | On the inventory, or in compliance with the inventory |
| Korea KECI | : | On the inventory, or in compliance with the inventory |
| Philippines PICCS | : | On the inventory, or in compliance with the inventory |
| China IECSC | : | On the inventory, or in compliance with the inventory |

## SECTION 16: Other information

**NFPA Classification** : Health Hazard: 2
Fire Hazard: 3
Reactivity Hazard: 0




**Further information**

Legacy MSDS Number : 34310

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this MSDS pertains only to the product as shipped.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

| Key or legend to abbreviations and acronyms used in the safety data sheet | | | |
|---|---|---|---|
| ACGIH | American Conference of Government Industrial Hygienists | LD50 | Lethal Dose 50% |
| AICS | Australia, Inventory of Chemical Substances | LOAEL | Lowest Observed Adverse Effect Level |
| DSL | Canada, Domestic Substances List | NFPA | National Fire Protection Agency |
| NDSL | Canada, Non-Domestic Substances List | NIOSH | National Institute for Occupational Safety & Health |
| CNS | Central Nervous System | NTP | National Toxicology Program |
| CAS | Chemical Abstract Service | NZIoC | New Zealand Inventory of Chemicals |
| EC50 | Effective Concentration | NOAEL | No Observable Adverse Effect Level |
| EC50 | Effective Concentration 50% | NOEC | No Observed Effect Concentration |
| EGEST | EOSCA Generic Exposure Scenario Tool | OSHA | Occupational Safety & Health Administration |
| EOSCA | European Oilfield Specialty Chemicals Association | PEL | Permissible Exposure Limit |
| EINECS | European Inventory of Existing Chemical Substances | PICCS | Philippines Inventory of Commercial Chemical Substances |
| MAK | Germany Maximum Concentration Values | PRNT | Presumed Not Toxic |
| GHS | Globally Harmonized System | RCRA | Resource Conservation Recovery Act |
| >= | Greater Than or Equal To | STEL | Short-term Exposure Limit |
| IC50 | Inhibition Concentration 50% | SARA | Superfund Amendments and Reauthorization Act. |
| IARC | International Agency for Research on Cancer | TLV | Threshold Limit Value |
| IECSC | Inventory of Existing Chemical Substances in China | TWA | Time Weighted Average |
| ENCS | Japan, Inventory of Existing and New Chemical Substances | TSCA | Toxic Substance Control Act |
| KECI | Korea, Existing Chemical Inventory | UVCB | Unknown or Variable Composition, Complex Reaction Products, and Biological Materials |
| <= | Less Than or Equal To | WHMIS | Workplace Hazardous Materials Information System |
| LC50 | Lethal Concentration 50% | | |

**Full text of R-phrases referred to under sections 2 and 3**

| | |
|---|---|
| R11 | Highly flammable. |
| R38 | Irritating to skin. |
| R51 | Toxic to aquatic organisms. |
| R51/53 | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R53 | May cause long-term adverse effects in the aquatic environment. |
| R65 | Harmful: may cause lung damage if swallowed. |
| R67 | Vapors may cause drowsiness and dizziness. |

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| H225 | Highly flammable liquid and vapor. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H336 | May cause drowsiness or dizziness. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |

**Annex**

1. Short title of Exposure Scenario: **Solvent in other applications**

| | | |
|---|---|---|
| Main User Groups | : | **SU 3:** Industrial uses: Uses of substances as such or in preparations at industrial sites |
| Sector of use | : | **SU3:** Industrial Manufacturing (all) |
| Process category | : | **PROC1:** Use in closed process, no likelihood of exposure<br>**PROC2:** Use in closed, continuous process with occasional controlled exposure<br>**PROC3:** Use in closed batch process (synthesis or formulation)<br>**PROC4:** Use in batch and other process (synthesis) where opportunity for exposure arises<br>**PROC7:** Industrial spraying<br>**PROC8a:** Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities<br>**PROC8b:** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities<br>**PROC10:** Roller application or brushing<br>**PROC13:** Treatment of articles by dipping and pouring |
| Environmental release category | : | **ERC4:** Industrial use of processing aids in processes and products, not becoming part of articles |

**2.1 Contributing scenario controlling environmental exposure for:ERC4: Industrial use of processing aids in processes and products, not becoming part of articles**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |

**Environment factors not influenced by risk management**

| | | |
|---|---|---|
| Flow rate | : | 90.000 m3/d |

**Other given operational conditions affecting environmental exposure**

| | | |
|---|---|---|
| Emission or Release Factor: Air | : | 0,3 % |
| Emission or Release Factor: Water | : | 0,003 % |
| Emission or Release Factor: Soil | : | 0,1 % |
| Local release rate: Air | : | 0,66 kg/day |
| Local release rate: Water | : | 0,0065 kg/day |
| Local release rate: Soil | : | 40 kg/day |

**Technical conditions and measures / Organizational measures**

| | | |
|---|---|---|
| Air | : | Treat air emission to provide a typical removal efficiency of (%): (Effectiveness: 70 %) |
| Water | : | Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of ≥ (%): (Effectiveness: > 96,4 %) |

**Conditions and measures related to municipal sewage treatment plant**

| | | |
|---|---|---|
| Type of Sewage Treatment Plant | : | Municipal sewage treatment plant, No |

| | | |
|---|---|---|
| Flow rate of sewage treatment plant effluent | : | 2.000 m3/d |
| Sludge Treatment | : | Agricultural soil, No |

## 2.2 Contributing scenario controlling worker exposure for: PROC1: Use in closed process, no likelihood of exposure

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |
| Physical Form (at time of use) | : | Liquid substance |

**Frequency and duration of use**

| | | |
|---|---|---|
| Exposure duration | : | > 4 h |
| Frequency of use | : | 5 days/week |

**Human factors not influenced by risk management**

| | | |
|---|---|---|
| Exposed skin area | : | One hand face only (240 cm2) |

**Other operational conditions affecting workers exposure**

| | | |
|---|---|---|
| Outdoor / Indoor | : | Indoor |

**Technical conditions and measures**

Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**

Personal Protection, None required
Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC2: Use in closed, continuous process with occasional controlled exposure

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |
| Physical Form (at time of use) | : | Liquid substance |

**Frequency and duration of use**

| | | |
|---|---|---|
| Exposure duration | : | > 4 h |
| Frequency of use | : | 5 days/week |

**Human factors not influenced by risk management**

| | | |
|---|---|---|
| Exposed skin area | : | Palms of both hands (480 cm2) |

**Other operational conditions affecting workers exposure**

| | | |
|---|---|---|
| Outdoor / Indoor | : | Indoor |

**Technical conditions and measures**

Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**

Protective gloves (Effectiveness: 90 %)

Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC3: Use in closed batch process (synthesis or formulation)

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |
| Physical Form (at time of use) | : | Liquid substance |

**Frequency and duration of use**

| | | |
|---|---|---|
| Exposure duration | : | > 4 h |
| Frequency of use | : | 5 days/week |

**Human factors not influenced by risk management**

| | | |
|---|---|---|
| Exposed skin area | : | One hand face only (240 cm2) |

**Other operational conditions affecting workers exposure**

| | | |
|---|---|---|
| Outdoor / Indoor | : | Indoor |

**Technical conditions and measures**

Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**

Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |
| Physical Form (at time of use) | : | Liquid substance |

**Frequency and duration of use**

| | | |
|---|---|---|
| Exposure duration | : | > 4 h |
| Frequency of use | : | 5 days/week |

**Human factors not influenced by risk management**

| | | |
|---|---|---|
| Exposed skin area | : | Palms of both hands (480 cm2) |

**Other operational conditions affecting workers exposure**

| | | |
|---|---|---|
| Outdoor / Indoor | : | Indoor |

**Technical conditions and measures**

Local exhaust ventilation- inhalation:, Yes (Effectiveness: 90 %)

**Conditions and measures related to personal protection, hygiene and health evaluation**

Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC7: Industrial spraying

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |
| Physical Form (at time of use) | : | Liquid substance |

**Frequency and duration of use**

| | | |
|---|---|---|
| Exposure duration | : | > 4 h |
| Frequency of use | : | 5 days/week |

**Human factors not influenced by risk management**

: 1500 cm2

**Other operational conditions affecting workers exposure**

| | | |
|---|---|---|
| Outdoor / Indoor | : | Indoor |

**Technical conditions and measures**

Local exhaust ventilation-dermal:, Yes (Effectiveness: 95 %)

**Conditions and measures related to personal protection, hygiene and health evaluation**

Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |
| Physical Form (at time of use) | : | Liquid substance |

**Frequency and duration of use**

| | | |
|---|---|---|
| Exposure duration | : | > 4 h |
| Frequency of use | : | 5 days/week |

**Human factors not influenced by risk management**

| | | |
|---|---|---|
| Exposed skin area | : | Two hands (960 cm2) |

**Other operational conditions affecting workers exposure**

| | | |
|---|---|---|
| Outdoor / Indoor | : | Indoor |

**Technical conditions and measures**

Local exhaust ventilation- inhalation:, Yes (Effectiveness: 90 %)

**Conditions and measures related to personal protection, hygiene and health evaluation**

Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC8b: Transfer of

**substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation- inhalation:, Yes (Effectiveness: 95 %)

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

**2.2 Contributing scenario controlling worker exposure for: PROC10: Roller application or brushing**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : 1 - 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation- inhalation:, Yes (Effectiveness: 90 %)

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

**2.2 Contributing scenario controlling worker exposure for: PROC13: Treatment of articles by dipping and pouring**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Palms of both hands (480 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation- inhalation:, Yes (Effectiveness: 90 %)

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

## 3. Exposure estimation and reference to its source

**Environment**

| Contributing Scenario | Exposure Assessment Method | Specific conditions | Compartment | Value type | Level of Exposure | Risk characterization ratio |
|---|---|---|---|---|---|---|
| ERC4 | Petrorisk | | Freshwater | | 0,00018 mg/L | |
| | | | Freshwater sediment | | 0,0043 mg/kg dry weight (d.w.) | |
| | | | Marine water | | 0,000018 mg/L | |
| | | | Marine sediment | | 0,00043 mg/kg dry weight (d.w.) | |
| | | | Sewage treatment plant | | 0,0018 mg/L | |
| | | | Agricultural soil | | 0,0000012 mg/kg | |

ERC4: Industrial use of processing aids in processes and products, not becoming part of articles

**Workers/Consumers**

| Contributing Scenario | Exposure Assessment Method | Specific conditions | Value type | Level of Exposure | Risk characterization ratio |
|---|---|---|---|---|---|
| PROC1 | EasyTRA | | Worker – dermal, long-term – systemic | 0,020571 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 0,024547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 0,024078 mg/kg/d | |
| PROC2 | EasyTRA | | Worker – dermal, long-term – systemic | 0,082286 mg/kg/d | |

| | | | | | |
|---|---|---|---|---|---|
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 1,836 mg/kg/d | |
| PROC3 | EasyTRA | | Worker – dermal, long-term – systemic | 0,041143 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 24,547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,548 mg/kg/d | |
| PROC4 | EasyTRA | | Worker – dermal, long-term – systemic | 0,411429 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 4,909 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 1,113 mg/kg/d | |
| PROC7 | EasyTRA | | Worker – dermal, long-term – systemic | 0,128571 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 30,683 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 4,512 mg/kg/d | |
| PROC8a | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,576 mg/kg/d | |
| PROC8b | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 3,068 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 1,261 mg/kg/d | |
| PROC10 | EasyTRA | | Worker – dermal, long-term – systemic | 0,987429 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 7,364 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,039 mg/kg/d | |
| PROC13 | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,576 mg/kg/d | |

PROC1: Use in closed process, no likelihood of exposure

PROC2: Use in closed, continuous process with occasional controlled exposure

PROC3: Use in closed batch process (synthesis or formulation)

PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises

PROC7: Industrial spraying

PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities

PROC10: Roller application or brushing

PROC13: Treatment of articles by dipping and pouring

## 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

Predicted releases are not expected to lead to environmental concentrations which would exceed the PNEC when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

1. Short title of Exposure Scenario: **Use in polymer processing – professional**

| | | |
|---|---|---|
| Main User Groups | : | **SU 22:** Professional uses: Public domain (administration, education, entertainment, services, craftsmen) |
| Sector of use | : | **SU 22, SU0:** Professional uses: Public domain (administration, education, entertainment, services, craftsmen), Other |
| Process category | : | **PROC1:** Use in closed process, no likelihood of exposure<br>**PROC2:** Use in closed, continuous process with occasional controlled exposure<br>**PROC6:** Calendering operations<br>**PROC8a:** Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities<br>**PROC8b:** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities<br>**PROC14:** Production of mixtures or articles by tabletting, compression, extrusion, pelletization; Industrial setting;<br>**PROC21:** Low energy manipulation of substances bound in materials and/ or articles |
| Environmental release category | : | **ERC8a, ERC8d:** Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems |
| Further information | : | Processing of formulated polymers including material transfers, moulding and forming activities, material re-works and associated maintenance. |

### 2.1 Contributing scenario controlling environmental exposure for:ERC8a, ERC8d: Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |

**Environment factors not influenced by risk management**

| | | |
|---|---|---|
| Flow rate | : | 90.000 m3/d |

**Other given operational conditions affecting environmental exposure**

| | | |
|---|---|---|
| Emission or Release Factor: Air | : | 98 % |
| Emission or Release Factor: Water | : | 1 % |
| Emission or Release Factor: Soil | : | 1 % |
| Local release rate: Water | : | 1,6 kg/day |
| Local release rate: Air | : | 160 kg/day |
| Local release rate: Soil | : | 0,0033 kg/day |

**Technical conditions and measures / Organizational measures**

| | | |
|---|---|---|
| Air | : | Treat air emission to provide a typical removal efficiency of (%): (Effectiveness: 0 %) |
| Water | : | Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of ≥ (%): (Effectiveness: > 96,4 %) |

**Conditions and measures related to municipal sewage treatment plant**

| | | |
|---|---|---|
| Type of Sewage Treatment Plant | : | Municipal sewage treatment plant, No |
| Flow rate of sewage treatment plant effluent | : | 2.000 m3/d |
| Sludge Treatment | : | Agricultural soil, Yes, applicable |

## 2.2 Contributing scenario controlling worker exposure for: PROC1: Use in closed process, no likelihood of exposure

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |
| Physical Form (at time of use) | : | Liquid substance |

**Frequency and duration of use**

| | | |
|---|---|---|
| Exposure duration | : | > 4 h |
| Frequency of use | : | 5 days/week |

**Human factors not influenced by risk management**

| | | |
|---|---|---|
| Exposed skin area | : | One hand face only (240 cm2) |

**Other operational conditions affecting workers exposure**

| | | |
|---|---|---|
| Outdoor / Indoor | : | Indoor |

**Technical conditions and measures**

Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**

Personal Protection, None required
Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC2: Use in closed, continuous process with occasional controlled exposure

**Product characteristics**

Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Palms of both hands (480 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC6: Calendering operations

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : 1 - 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

## 2.2 Contributing scenario controlling worker exposure for: PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

**Product characteristics**
Concentration of the Substance in : 5-25%

Mixture/Article

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, Yes, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

## 2.2 Contributing scenario controlling worker exposure for: PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, Yes, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

## 2.2 Contributing scenario controlling worker exposure for: PROC14: Production of mixtures or articles by tabletting, compression, extrusion, pelletization; Industrial setting;

**Product characteristics**
Concentration of the Substance in : 5-25%

Mixture/Article

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Palms of both hands (480 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, Yes, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

## 2.2 Contributing scenario controlling worker exposure for: PROC21: Low energy manipulation of substances bound in materials and/ or articles

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Skin
: 1980 cm2

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, Yes, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

## 3. Exposure estimation and reference to its source

**Environment**

| Contributing Scenario | Exposure Assessment | Specific conditions | Compartment | Value type | Level of Exposure | Risk characterization |
|---|---|---|---|---|---|---|

| | Method | | | | | ratio |
|---|---|---|---|---|---|---|
| ERC8a, ERC8d | Petrorisk | | Freshwater | | 0,0000065 mg/L | |
| | | | Freshwater sediment | | 0,000035 mg/kg dry weight (d.w.) | |
| | | | Marine water | | 0,0000001 mg/L | |
| | | | Marine sediment | | 0,0000035 mg/kg dry weight (d.w.) | |
| | | | Sewage treatment plant | | 0,000015 mg/L | |
| | | | Agricultural soil | | 0,00001 mg/kg | |

ERC8a: Wide dispersive indoor use of processing aids in open systems
ERC8d: Wide dispersive outdoor use of processing aids in open systems

**Workers/Consumers**

| Contributing Scenario | Exposure Assessment Method | Specific conditions | Value type | Level of Exposure | Risk characterization ratio |
|---|---|---|---|---|---|
| PROC1 | EasyTRA | | Worker – dermal, long-term – systemic | 0,020571 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 0,024547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 0,024078 mg/kg/d | |
| PROC2 | EasyTRA | | Worker – dermal, long-term – systemic | 0,082286 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 49,093 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 7,096 mg/kg/d | |
| PROC6 | EasyTRA | | Worker – dermal, long-term – systemic | 0,987429 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 14,728 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,091 mg/kg/d | |
| PROC8a | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 24,547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 4,33 mg/kg/d | |
| PROC8b | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,576 mg/kg/d | |
| PROC14 | EasyTRA | | Worker – dermal, long-term – systemic | 0,205714 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 24,547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,712 mg/kg/d | |
| PROC21 | EasyTRA | | Worker – dermal, long-term – systemic | 0,169714 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | | |

| | | | | | |
|---|---|---|---|---|---|
| | | | Worker – long-term – systemic Combined routes | 0,169714 mg/kg/d | |

PROC1: Use in closed process, no likelihood of exposure

PROC2: Use in closed, continuous process with occasional controlled exposure

PROC6: Calendering operations

PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities

PROC14: Production of mixtures or articles by tabletting, compression, extrusion, pelletization; Industrial setting;

PROC21: Low energy manipulation of substances bound in materials and/ or articles

## 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

Predicted releases are not expected to lead to environmental concentrations which would exceed the PNEC when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

1. Short title of Exposure Scenario: **Use in coatings – professional**

| | | |
|---|---|---|
| Main User Groups | : | **SU 22:** Professional uses: Public domain (administration, education, entertainment, services, craftsmen) |
| Sector of use | : | **SU 22, SU0:** Professional uses: Public domain (administration, education, entertainment, services, craftsmen), Other |
| Process category | : | **PROC1:** Use in closed process, no likelihood of exposure<br>**PROC2:** Use in closed, continuous process with occasional controlled exposure<br>**PROC3:** Use in closed batch process (synthesis or formulation)<br>**PROC4:** Use in batch and other process (synthesis) where opportunity for exposure arises<br>**PROC5:** Mixing or blending in batch processes for formulation of mixtures and articles (multistage and/or significant contact) Industrial setting;<br>**PROC8a:** Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities<br>**PROC8b:** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities<br>**PROC10:** Roller application or brushing<br>**PROC11:** Non industrial spraying |

| | | |
|---|---|---|
| | | **PROC13:** Treatment of articles by dipping and pouring<br>**PROC15:** Use as laboratory reagent<br>**PROC19:** Hand-mixing with intimate contact and only PPE available |
| Environmental release category | : | **ERC8a, ERC8d:** Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems |
| Further information | : | Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods, and film formation), and equipment cleaning, maintenance and associated laboratory activities. |

## 2.1 Contributing scenario controlling environmental exposure for:ERC8a, ERC8d: Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |

**Environment factors not influenced by risk management**

| | | |
|---|---|---|
| Flow rate | : | 90.000 m3/d |

**Other given operational conditions affecting environmental exposure**

| | | |
|---|---|---|
| Emission or Release Factor: Air | : | 98 % |
| Emission or Release Factor: Water | : | 1 % |
| Emission or Release Factor: Soil | : | 1 % |
| Local release rate: Water | : | 1,1 kg/day |
| Local release rate: Air | : | 11 kg/day |
| Local release rate: Soil | : | 0,000002 kg/day |

**Technical conditions and measures / Organizational measures**

| | | |
|---|---|---|
| Air | : | Treat air emission to provide a typical removal efficiency of (%): (Effectiveness: 0 %) |
| Water | : | Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of ≥ (%): (Effectiveness: > 96,4 %) |

**Conditions and measures related to municipal sewage treatment plant**

| | | |
|---|---|---|
| Type of Sewage Treatment Plant | : | Municipal sewage treatment plant, No |
| Flow rate of sewage treatment plant effluent | : | 2.000 m3/d |
| Sludge Treatment | : | Agricultural soil, Yes, applicable |

## 2.2 Contributing scenario controlling worker exposure for: PROC1: Use in closed process, no likelihood of exposure

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : One hand face only (240 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Personal Protection, None required
Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC2: Use in closed, continuous process with occasional controlled exposure

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Palms of both hands (480 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC3: Use in closed batch process (synthesis or formulation)

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : One hand face only (240 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

**2.2 Contributing scenario controlling worker exposure for: PROC4, PROC5, PROC13: Use in batch and other process (synthesis) where opportunity for exposure arises, Mixing or blending in batch processes for formulation of mixtures and articles (multistage and/or significant contact) Industrial setting;, Treatment of articles by dipping and pouring**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Palms of both hands (480 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

**2.2 Contributing scenario controlling worker exposure for: PROC8a, PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

## 2.2 Contributing scenario controlling worker exposure for: PROC10: Roller application or brushing

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : 1 - 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

## 2.2 Contributing scenario controlling worker exposure for: PROC11: Non industrial spraying

**Product characteristics**
Concentration of the Substance in Mixture/Article : 1-5%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : 1 - 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Skin
: 1500 cm2

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 95 %)

## 2.2 Contributing scenario controlling worker exposure for: PROC15: Use as laboratory reagent

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : One hand face only (240 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

## 2.2 Contributing scenario controlling worker exposure for: PROC19: Hand-mixing with intimate contact and only PPE available

**Product characteristics**
Concentration of the Substance in Mixture/Article : 1-5%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : 15 - 60 min
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Skin
: 1980 cm2

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

## 3. Exposure estimation and reference to its source

**Environment**

| Contributing Scenario | Exposure Assessment Method | Specific conditions | Compartment | Value type | Level of Exposure | Risk characterization ratio |
|---|---|---|---|---|---|---|
| ERC8a, ERC8d | Petrorisk | | Freshwater | | 0,000006 mg/L | |
| | | | Freshwater sediment | | 0,000055 mg/kg dry weight (d.w.) | |
| | | | Marine water | | 0,000099 µg/L | |
| | | | Marine sediment | | 0,0000024 mg/kg dry weight (d.w.) | |
| | | | Sewage treatment plant | | 0,0000099 mg/L | |
| | | | Agricultural soil | | 0,0000069 mg/kg | |

ERC8a: Wide dispersive indoor use of processing aids in open systems
ERC8d: Wide dispersive outdoor use of processing aids in open systems

**Workers/Consumers**

| Contributing Scenario | Exposure Assessment Method | Specific conditions | Value type | Level of Exposure | Risk characterization ratio |
|---|---|---|---|---|---|
| PROC1 | EasyTRA | | Worker – dermal, long-term – systemic | 0,020571 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 0,024547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 0,024078 mg/kg/d | |
| PROC2 | EasyTRA | | Worker – dermal, long-term – systemic | 0,082286 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 49,093 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 7,096 mg/kg/d | |
| PROC3 | EasyTRA | | Worker – dermal, long- | 0,041143 mg/kg/d | |

| | | | | | |
|---|---|---|---|---|---|
| | | | term – systemic | | |
| | | | Worker – inhalation, long-term – systemic | 61,366 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 8,808 mg/kg/d | |
| PROC4 | EasyTRA | | Worker – dermal, long-term – systemic | 0,411429 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,165 mg/kg/d | |
| PROC5 | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 14,728 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,598 mg/kg | |
| PROC13 | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 24,547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 4,33 mg/kg | |
| PROC8a | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 24,547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 4,33 mg/kg/d | |
| PROC8b | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,576 mg/kg/d | |
| PROC10 | EasyTRA | | Worker – dermal, long-term – systemic | 0,987429 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 14,728 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,091 mg/kg/d | |
| PROC11 | EasyTRA | | Worker – dermal, long-term – systemic | 1,286 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,039 mg/kg/d | |
| PROC15 | EasyTRA | | Worker – dermal, long-term – systemic | 0,020571 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 2,455 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 0,371236 mg/kg/d | |
| PROC19 | EasyTRA | | Worker – dermal, long-term – systemic | 0,565714 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 1,636 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 0,799491 mg/kg/d | |

PROC1: Use in closed process, no likelihood of exposure

PROC2: Use in closed, continuous process with occasional controlled exposure

PROC3: Use in closed batch process (synthesis or formulation)

PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises

PROC5: Mixing or blending in batch processes for formulation of mixtures and articles (multistage and/or significant contact) Industrial setting;

PROC13: Treatment of articles by dipping and pouring

PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities

PROC10: Roller application or brushing

PROC11: Non industrial spraying

PROC15: Use as laboratory reagent

PROC19: Hand-mixing with intimate contact and only PPE available

## 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

Predicted releases are not expected to lead to environmental concentrations which would exceed the PNEC when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

1. Short title of Exposure Scenario: **Lubricants - Professional**

| | | |
|---|---|---|
| Main User Groups | : | **SU 22:** Professional uses: Public domain (administration, education, entertainment, services, craftsmen) |
| Sector of use | : | **SU 22, SU0:** Professional uses: Public domain (administration, education, entertainment, services, craftsmen), Other |
| Process category | : | **PROC1:** Use in closed process, no likelihood of exposure<br>**PROC2:** Use in closed, continuous process with occasional controlled exposure<br>**PROC3:** Use in closed batch process (synthesis or formulation)<br>**PROC4:** Use in batch and other process (synthesis) where opportunity for exposure arises<br>**PROC8a:** Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities<br>**PROC8b:** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities<br>**PROC9:** Transfer of substance or preparation into small |

containers (dedicated filling line, including weighing)
**PROC10:** Roller application or brushing
**PROC11:** Non industrial spraying
**PROC13:** Treatment of articles by dipping and pouring
**PROC17:** Lubrication at high energy conditions and in partly open process
**PROC18:** Greasing at high energy conditions
**PROC20:** Heat and pressure transfer fluids in dispersive, professional use but closed systems

| | | |
|---|---|---|
| Environmental release category | : | **ERC8a, ERC8d, ERC9a, ERC9b:** Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems, Wide dispersive indoor use of substances in closed systems, Wide dispersive outdoor use of substances in closed systems |
| Further information | : | Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of engines and similar articles, reworking on reject articles, equipment maintenance and disposal of waste oil. |

**2.1 Contributing scenario controlling environmental exposure for:ERC8a, ERC8d, ERC9a, ERC9b: Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems, Wide dispersive indoor use of substances in closed systems, Wide dispersive outdoor use of substances in closed systems**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |

**Environment factors not influenced by risk management**

| | | |
|---|---|---|
| Flow rate | : | 90.000 m3/d |

**Other given operational conditions affecting environmental exposure**

| | | |
|---|---|---|
| Emission or Release Factor: Air | : | 40 % |
| Emission or Release Factor: Water | : | 5 % |
| Emission or Release Factor: Soil | : | 5 % |
| Local release rate: Water | : | 5,6 kg/day |
| Local release rate: Air | : | 44 kg/day |
| Local release rate: Soil | : | 0,011 kg/day |

**Technical conditions and measures / Organizational measures**

| | | |
|---|---|---|
| Air | : | Treat air emission to provide a typical removal efficiency of (%): (Effectiveness: 0 %) |
| Water | : | Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of ≥ (%): (Effectiveness: > 96,4 %) |

**Conditions and measures related to municipal sewage treatment plant**

| | | |
|---|---|---|
| Type of Sewage Treatment Plant | : | Municipal sewage treatment plant, No |
| Flow rate of sewage treatment plant effluent | : | 2.000 m3/d |
| Sludge Treatment | : | Agricultural soil, Yes, applicable |

**2.2 Contributing scenario controlling worker exposure for: PROC1: Use in closed**

**process, no likelihood of exposure**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : One hand face only (240 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
None required
Respiratory Protection, None required

**2.2 Contributing scenario controlling worker exposure for: PROC2: Use in closed, continuous process with occasional controlled exposure**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Palms of both hands (480 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

**2.2 Contributing scenario controlling worker exposure for: PROC3: Use in closed batch process (synthesis or formulation)**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : One hand face only (240 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

**2.2 Contributing scenario controlling worker exposure for: PROC4, PROC9, PROC13, PROC20: Use in batch and other process (synthesis) where opportunity for exposure arises, Transfer of substance or preparation into small containers (dedicated filling line, including weighing), Treatment of articles by dipping and pouring, Heat and pressure transfer fluids in dispersive, professional use but closed systems**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Palms of both hands (480 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

**2.2 Contributing scenario controlling worker exposure for: PROC8a, PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at**

**non-dedicated facilities, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

**2.2 Contributing scenario controlling worker exposure for: PROC10, PROC18: Roller application or brushing, Greasing at high energy conditions**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : 1 - 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

**2.2 Contributing scenario controlling worker exposure for: PROC11: Non industrial spraying**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 1 - 5%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : 1 - 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Skin
: 1500 cm2

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 95 %)

## 2.2 Contributing scenario controlling worker exposure for: PROC17: Lubrication at high energy conditions and in partly open process

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : 1 - 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 95 %)

## 3. Exposure estimation and reference to its source

**Environment**

| Contributing Scenario | Exposure Assessment Method | Specific conditions | Compartment | Value type | Level of Exposure | Risk characterization ratio |
|---|---|---|---|---|---|---|
| ERC8a, ERC8d, ERC9a, ERC9b | Petrorisk | | Freshwater | | 0,0000049 mg/L | |
| | | | Freshwater sediment | | 0,00012 mg/kg dry weight (d.w.) | |
| | | | Marine water | | 0,00049 µg/L | |
| | | | Marine sediment | | 0,000012 mg/kg dry weight (d.w.) | |
| | | | Sewage treatment plant | | 0,000049 mg/L | |
| | | | Agricultural soil | | 0,000035 mg/kg | |

ERC8a: Wide dispersive indoor use of processing aids in open systems
ERC8d: Wide dispersive outdoor use of processing aids in open systems
ERC9a: Wide dispersive indoor use of substances in closed systems
ERC9b: Wide dispersive outdoor use of substances in closed systems

**Workers/Consumers**

| Contributing Scenario | Exposure Assessment Method | Specific conditions | Value type | Level of Exposure | Risk characterization ratio |
|---|---|---|---|---|---|
| PROC1 | EasyTRA | | Worker – dermal, long-term – systemic | 0,020571 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 0,024547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 0,024078 mg/kg/d | |
| PROC2 | EasyTRA | | Worker – dermal, long-term – systemic | 0,082286 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 49,093 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 7,096 mg/kg/d | |
| PROC3 | EasyTRA | | Worker – dermal, long-term – systemic | 0,041143 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 61,366 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 8,808 mg/kg/d | |
| PROC4 | EasyTRA | | Worker – dermal, long-term – systemic | 0,411429 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,165 mg/kg/d | |
| PROC9 | EasyTRA | | Worker – dermal, long-term – systemic | 0,411429 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 24,547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,918 mg/kg/d | |
| PROC13 | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 24,547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 4,33 mg/kg/d | |
| PROC20 | EasyTRA | | Worker – dermal, long- | 0,102857 mg/kg/d | |

| | | | | | |
|---|---|---|---|---|---|
| | | | term – systemic | | |
| | | | Worker – inhalation, long-term – systemic | 4,909 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 0,804186 mg/kg/d | |
| PROC8a | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 24,547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 4,33 mg/kg/d | |
| PROC8b | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,576 mg/kg/d | |
| PROC10 | EasyTRA | | Worker – dermal, long-term – systemic | 0,987429 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 14,728 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,091 mg/kg/d | |
| PROC18 | EasyTRA | | Worker – dermal, long-term – systemic | 0,493714 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 29,456 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 4,702 mg/kg/d | |
| PROC11 | EasyTRA | | Worker – dermal, long-term – systemic | 1,286 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,039 mg/kg/d | |
| PROC17 | EasyTRA | | Worker – dermal, long-term – systemic | 0,987429 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 14,728 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,091 mg/kg/d | |

PROC1: Use in closed process, no likelihood of exposure

PROC2: Use in closed, continuous process with occasional controlled exposure

PROC3: Use in closed batch process (synthesis or formulation)

PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises

PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

PROC13: Treatment of articles by dipping and pouring

PROC20: Heat and pressure transfer fluids in dispersive, professional use but closed systems

PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities

PROC10: Roller application or brushing

PROC18: Greasing at high energy conditions

PROC11: Non industrial spraying

PROC17: Lubrication at high energy conditions and in partly open process

## 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

Predicted releases are not expected to lead to environmental concentrations which would exceed the PNEC when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

1. Short title of Exposure Scenario: **Use as a cleaning agent – professional**

| | | |
|---|---|---|
| Main User Groups | : | **SU 22:** Professional uses: Public domain (administration, education, entertainment, services, craftsmen) |
| Sector of use | : | **SU 22, SU0:** Professional uses: Public domain (administration, education, entertainment, services, craftsmen), Other |
| Process category | : | **PROC1:** Use in closed process, no likelihood of exposure<br>**PROC2:** Use in closed, continuous process with occasional controlled exposure<br>**PROC3:** Use in closed batch process (synthesis or formulation)<br>**PROC4:** Use in batch and other process (synthesis) where opportunity for exposure arises<br>**PROC8a:** Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities<br>**PROC8b:** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities<br>**PROC10:** Roller application or brushing<br>**PROC11:** Non industrial spraying<br>**PROC13:** Treatment of articles by dipping and pouring |
| Environmental release category | : | **ERC8a, ERC8d:** Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems |
| Further information | : | Covers the use as a component of cleaning products including pouring/unloading from drums or containers; and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping automated and by hand). |

## 2.1 Contributing scenario controlling environmental exposure for:ERC8a, ERC8d: Wide

**dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |

**Environment factors not influenced by risk management**

| | | |
|---|---|---|
| Flow rate | : | 90.000 m3/d |

**Other given operational conditions affecting environmental exposure**

| | | |
|---|---|---|
| Emission or Release Factor: Air | : | 2 % |
| Emission or Release Factor: Water | : | 0,0001 % |
| Emission or Release Factor: Soil | : | 0 % |
| Local release rate: Water | : | 1,1 kg/day |
| Local release rate: Air | : | 22 kg/day |
| Local release rate: Soil | : | |
| Remarks | : | There is no direct exposure to soil. |

**Technical conditions and measures / Organizational measures**

| | | |
|---|---|---|
| Air | : | Treat air emission to provide a typical removal efficiency of (%): (Effectiveness: 0 %) |
| Water | : | Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of ≥ (%): (Effectiveness: > 96,4 %) |

**Conditions and measures related to municipal sewage treatment plant**

| | | |
|---|---|---|
| Type of Sewage Treatment Plant | : | Municipal sewage treatment plant, No |
| Flow rate of sewage treatment plant effluent | : | 2.000 m3/d |
| Sludge Treatment | : | Agricultural soil, Yes, applicable |

## 2.2 Contributing scenario controlling worker exposure for: PROC1: Use in closed process, no likelihood of exposure

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |
| Physical Form (at time of use) | : | Liquid substance |

**Frequency and duration of use**

| | | |
|---|---|---|
| Exposure duration | : | > 4 h |
| Frequency of use | : | 5 days/week |

**Human factors not influenced by risk management**

| | | |
|---|---|---|
| Exposed skin area | : | One hand face only (240 cm2) |

**Other operational conditions affecting workers exposure**

| | | |
|---|---|---|
| Outdoor / Indoor | : | Indoor |

**Technical conditions and measures**

Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**

None required
Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC2: Use in closed, continuous process with occasional controlled exposure

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |
| Physical Form (at time of use) | : | Liquid substance |

**Frequency and duration of use**

| | | |
|---|---|---|
| Exposure duration | : | > 4 h |
| Frequency of use | : | 5 days/week |

**Human factors not influenced by risk management**

| | | |
|---|---|---|
| Exposed skin area | : | Palms of both hands (480 cm2) |

**Other operational conditions affecting workers exposure**

| | | |
|---|---|---|
| Outdoor / Indoor | : | Indoor |

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC3: Use in closed batch process (synthesis or formulation)

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |
| Physical Form (at time of use) | : | Liquid substance |

**Frequency and duration of use**

| | | |
|---|---|---|
| Exposure duration | : | > 4 h |
| Frequency of use | : | 5 days/week |

**Human factors not influenced by risk management**

| | | |
|---|---|---|
| Exposed skin area | : | One hand face only (240 cm2) |

**Other operational conditions affecting workers exposure**

| | | |
|---|---|---|
| Outdoor / Indoor | : | Indoor |

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

**2.2 Contributing scenario controlling worker exposure for: PROC4, PROC13: Use in batch and other process (synthesis) where opportunity for exposure arises, Treatment of articles by dipping and pouring**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Palms of both hands (480 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

**2.2 Contributing scenario controlling worker exposure for: PROC8a, PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)

Respiratory Protection, Yes (Effectiveness: 90 %)

## 2.2 Contributing scenario controlling worker exposure for: PROC10: Roller application or brushing

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |
| Physical Form (at time of use) | : | Liquid substance |

**Frequency and duration of use**

| | | |
|---|---|---|
| Exposure duration | : | 1 - 4 h |
| Frequency of use | : | 5 days/week |

**Human factors not influenced by risk management**

| | | |
|---|---|---|
| Exposed skin area | : | Two hands (960 cm2) |

**Other operational conditions affecting workers exposure**

| | | |
|---|---|---|
| Outdoor / Indoor | : | Indoor |

**Technical conditions and measures**

Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**

Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

## 2.2 Contributing scenario controlling worker exposure for: PROC11: Non industrial spraying

**Product characteristics**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 1-5% |
| Physical Form (at time of use) | : | Liquid substance |

**Frequency and duration of use**

| | | |
|---|---|---|
| Exposure duration | : | 1 - 4 h |
| Frequency of use | : | 5 days/week |

**Human factors not influenced by risk management**

| | | |
|---|---|---|
| Exposed skin area | : | Skin |
| | : | 1500 cm2 |

**Other operational conditions affecting workers exposure**

| | | |
|---|---|---|
| Outdoor / Indoor | : | Indoor |

**Technical conditions and measures**

Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**

Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 95 %)

## 3. Exposure estimation and reference to its source

### Environment

| Contributing Scenario | Exposure Assessment Method | Specific conditions | Compartment | Value type | Level of Exposure | Risk characterization ratio |
|---|---|---|---|---|---|---|
| ERC8a, ERC8d | Petrorisk | | Freshwater | | 0,000005 mg/L | |
| | | | Freshwater sediment | | 0,000032 mg/kg dry weight (d.w.) | |
| | | | Marine water | | 0,000014 µg/L | |
| | | | Marine sediment | | 0,000056 µg/kg dry weight (d.w.) | |
| | | | Sewage treatment plant | | 0,00099 ng/L | |
| | | | Agricultural soil | | 0,00046 mg/kg | |

ERC8a: Wide dispersive indoor use of processing aids in open systems
ERC8d: Wide dispersive outdoor use of processing aids in open systems

### Workers/Consumers

| Contributing Scenario | Exposure Assessment Method | Specific conditions | Value type | Level of Exposure | Risk characterization ratio |
|---|---|---|---|---|---|
| PROC1 | EasyTRA | | Worker – dermal, long-term – systemic | 0,020571 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 0,024547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 0,024078 mg/kg/d | |
| PROC2 | EasyTRA | | Worker – dermal, long-term – systemic | 0,082286 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 49,093 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 7,096 mg/kg/d | |
| PROC3 | EasyTRA | | Worker – dermal, long-term – systemic | 0,041143 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 61,366 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 8,808 mg/kg/d | |
| PROC4 | EasyTRA | | Worker – dermal, long-term – systemic | 0,411429 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,165 mg/kg/d | |
| PROC13 | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 24,547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 4,33 mg/kg/d | |
| PROC8a | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |

| | | | | | |
|---|---|---|---|---|---|
| | | | Worker – inhalation, long-term – systemic | 24,547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 4,33 mg/kg/d | |
| PROC8b | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,576 mg/kg/d | |
| PROC10 | EasyTRA | | Worker – dermal, long-term – systemic | 0,987429 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 14,728 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,091 mg/kg/d | |
| PROC11 | EasyTRA | | Worker – dermal, long-term – systemic | 1,286 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,039 mg/kg/d | |

PROC1: Use in closed process, no likelihood of exposure

PROC2: Use in closed, continuous process with occasional controlled exposure

PROC3: Use in closed batch process (synthesis or formulation)

PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises

PROC13: Treatment of articles by dipping and pouring

PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities

PROC10: Roller application or brushing

PROC11: Non industrial spraying

## 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

Predicted releases are not expected to lead to environmental concentrations which would exceed the PNEC when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

1. Short title of Exposure Scenario: **Solvent in other applications- Professional**

Main User Groups : **SU 22:** Professional uses: Public domain (administration,

| | | |
|---|---|---|
| | | education, entertainment, services, craftsmen) |
| Sector of use | : | **SU 22, SU0:** Professional uses: Public domain (administration, education, entertainment, services, craftsmen), Other |
| Process category | : | **PROC1:** Use in closed process, no likelihood of exposure<br>**PROC2:** Use in closed, continuous process with occasional controlled exposure<br>**PROC3:** Use in closed batch process (synthesis or formulation)<br>**PROC4:** Use in batch and other process (synthesis) where opportunity for exposure arises<br>**PROC8a:** Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities<br>**PROC8b:** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities<br>**PROC10:** Roller application or brushing<br>**PROC11:** Non industrial spraying<br>**PROC13:** Treatment of articles by dipping and pouring |
| Environmental release category | : | **ERC8a, ERC8d:** Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems |

**2.1 Contributing scenario controlling environmental exposure for:ERC8a, ERC8d: Wide dispersive indoor use of processing aids in open systems, Wide dispersive outdoor use of processing aids in open systems**

| | | |
|---|---|---|
| Concentration of the Substance in Mixture/Article | : | 5-25% |

**Environment factors not influenced by risk management**

| | | |
|---|---|---|
| Flow rate | : | 90.000 m3/d |

**Other given operational conditions affecting environmental exposure**

| | | |
|---|---|---|
| Emission or Release Factor: Air | : | 40 % |
| Emission or Release Factor: Water | : | 5 % |
| Emission or Release Factor: Soil | : | 0 % |
| Local release rate: Water | : | 8,4 kg/day |
| Local release rate: Air | : | 66 kg/day |
| Local release rate: Soil | : | |
| Remarks | : | There is no direct exposure to soil. |

**Technical conditions and measures / Organizational measures**

| | | |
|---|---|---|
| Air | : | Treat air emission to provide a typical removal efficiency of (%): (Effectiveness: 0 %) |
| Water | : | Treat onsite wastewater (prior to receiving water discharge) to provide the required removal efficiency of ≥ (%): (Effectiveness: > 96,4 %) |

**Conditions and measures related to municipal sewage treatment plant**

| | | |
|---|---|---|
| Type of Sewage Treatment Plant | : | Municipal sewage treatment plant, No |
| Flow rate of sewage treatment plant effluent | : | 2.000 m3/d |

Sludge Treatment : Agricultural soil, Yes, applicable

## 2.2 Contributing scenario controlling worker exposure for: PROC1: Use in closed process, no likelihood of exposure

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : One hand face only (240 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
None required
Respiratory Protection, None required

## 2.2 Contributing scenario controlling worker exposure for: PROC2: Use in closed, continuous process with occasional controlled exposure

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Palms of both hands (480 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

**2.2 Contributing scenario controlling worker exposure for: PROC3: Use in closed batch process (synthesis or formulation)**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : One hand face only (240 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

**2.2 Contributing scenario controlling worker exposure for: PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Palms of both hands (480 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

**2.2 Contributing scenario controlling worker exposure for: PROC8a, PROC8b: Transfer**

**of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities, Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, None required

**2.2 Contributing scenario controlling worker exposure for: PROC10: Roller application or brushing**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : 1 - 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Two hands (960 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

**2.2 Contributing scenario controlling worker exposure for: PROC11: Non industrial**

**spraying**

**Product characteristics**
Concentration of the Substance in Mixture/Article : 1-5%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : 1 - 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Skin
: 1500 cm2

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 95 %)

## 2.2 Contributing scenario controlling worker exposure for: PROC13: Treatment of articles by dipping and pouring

**Product characteristics**
Concentration of the Substance in Mixture/Article : 5-25%

Physical Form (at time of use) : Liquid substance

**Frequency and duration of use**
Exposure duration : > 4 h
Frequency of use : 5 days/week

**Human factors not influenced by risk management**
Exposed skin area : Palms of both hands (480 cm2)

**Other operational conditions affecting workers exposure**
Outdoor / Indoor : Indoor

**Technical conditions and measures**
Local exhaust ventilation, No

**Conditions and measures related to personal protection, hygiene and health evaluation**
Protective gloves, APF 10 (Effectiveness: 90 %)
Respiratory Protection, Yes (Effectiveness: 90 %)

## 3. Exposure estimation and reference to its source

**Environment**

| Contributing Scenario | Exposure Assessment Method | Specific conditions | Compartment | Value type | Level of Exposure | Risk characterization ratio |
|---|---|---|---|---|---|---|
| ERC8a, ERC8d | Petrorisk | | Freshwater | | 0,0000074 mg/L | |
| | | | Freshwater sediment | | 0,00018 mg/kg dry weight (d.w.) | |
| | | | Marine water | | 0,00074 µg/L | |
| | | | Marine sediment | | 0,000018 mg/kg dry weight (d.w.) | |
| | | | Sewage treatment plant | | 0,000074 mg/L | |
| | | | Agricultural soil | | 0,000052 mg/kg | |

ERC8a: Wide dispersive indoor use of processing aids in open systems
ERC8d: Wide dispersive outdoor use of processing aids in open systems

**Workers/Consumers**

| Contributing Scenario | Exposure Assessment Method | Specific conditions | Value type | Level of Exposure | Risk characterization ratio |
|---|---|---|---|---|---|
| PROC1 | EasyTRA | | Worker – dermal, long-term – systemic | 0,020571 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 0,024547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 0,024078 mg/kg/d | |
| PROC2 | EasyTRA | | Worker – dermal, long-term – systemic | 0,082286 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 49,093 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 7,096 mg/kg/d | |
| PROC3 | EasyTRA | | Worker – dermal, long-term – systemic | 0,041143 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 61,366 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 8,808 mg/kg/d | |
| PROC4 | EasyTRA | | Worker – dermal, long-term – systemic | 0,411429 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,165 mg/kg/d | |
| PROC8a | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 24,547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 4,33 mg/kg/d | |
| PROC8b | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 2,576 mg/kg/d | |
| PROC10 | EasyTRA | | Worker – dermal, long- | 0,987429 mg/kg/d | |

| | | | | | |
|---|---|---|---|---|---|
| | | | term – systemic | | |
| | | | Worker – inhalation, long-term – systemic | 14,728 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,091 mg/kg/d | |
| PROC11 | EasyTRA | | Worker – dermal, long-term – systemic | 1,286 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 12,273 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 3,039 mg/kg/d | |
| PROC13 | EasyTRA | | Worker – dermal, long-term – systemic | 0,822857 mg/kg/d | |
| | | | Worker – inhalation, long-term – systemic | 24,547 mg/m3 | |
| | | | Worker – long-term – systemic Combined routes | 4,33 mg/kg/d | |

PROC1: Use in closed process, no likelihood of exposure

PROC2: Use in closed, continuous process with occasional controlled exposure

PROC3: Use in closed batch process (synthesis or formulation)

PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises

PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC8b: Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities

PROC10: Roller application or brushing

PROC11: Non industrial spraying

PROC13: Treatment of articles by dipping and pouring

## 4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the Exposure Scenario

Predicted releases are not expected to lead to environmental concentrations which would exceed the PNEC when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.Estimated workplace exposures are not expected to exceed DNELs when the identified risk management measures are adopted. Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Fisher Scientific

Part of Thermo Fisher Scientific

# SAFETY DATA SHEET

**Creation Date** 27-Jan-2010 **Revision Date** 02-Oct-2015 **Revision Number** 2

## 1. Identification

**Product Name** **Methylene chloride**

**Cat No. :** **D37-1; D37-4; D37-20; D37-200; D37-200LC; D37-500; D37FB-19; D37FB-50; D37FB-115; D37FB-200; D37POP-19; D37POPB-50; D37POPB-200; D37RB-19; D37RB-50; D37RB-115; D37RB-200; D37RS-19; D37RS-28; D37RS-50; D37RS-115; D37RS-200; D37SK-4; D37SK-4LC; D37SS-28; D37SS-50; D37SS-115; D37SS-200; D37SS-1350**

**Synonyms** Dichloromethane; DCM

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Emergency Telephone Number**
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

## 2. Hazard(s) identification

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Skin Corrosion/irritation | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Carcinogenicity | Category 1B |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Central nervous system (CNS), Respiratory system. | |
| Specific target organ toxicity - (repeated exposure) | Category 2 |
| Target Organs - Liver, Kidney, Blood. | |

**Label Elements**

**Signal Word**
Danger

**Hazard Statements**
Causes skin irritation
Causes serious eye irritation

May cause respiratory irritation
May cause drowsiness or dizziness
May cause cancer
May cause damage to organs through prolonged or repeated exposure



**Precautionary Statements**
**Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
**Response**
IF exposed or concerned: Get medical attention/advice
**Inhalation**
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
**Skin**
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
**Eyes**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
**Storage**
Store locked up
Store in a well-ventilated place. Keep container tightly closed
**Disposal**
Dispose of contents/container to an approved waste disposal plant
**Hazards not otherwise classified (HNOC)**

WARNING! This product contains a chemical known in the State of California to cause cancer, birth defects or other reproductive harm.

## 3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Methylene chloride | 75-09-2 | >99.5 |
| Methyl alcohol | 67-56-1 | 0 - 0.4 |
| Cyclohexene | 110-83-8 | 0 - 0.01 |
| 2-Methyl-2-butene | 513-35-9 | 0 - 0.01 |

## 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

**Ingestion** Do not induce vomiting. Call a physician or Poison Control Center immediately.

**Most important symptoms/effects** Breathing difficulties. . Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available
**Method -** No information available

**Autoignition Temperature** 556 °C / 1032.8 °F

**Explosion Limits**
**Upper** 23 vol %
**Lower** 13 vol %
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**
Carbon monoxide (CO) Carbon dioxide ($CO_2$) Hydrogen chloride gas Phosgene
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 2 | 1 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.

**Environmental Precautions** Should not be released into the environment. See Section 12 for additional ecological information.

**Methods for Containment and Clean Up** Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

**Handling** Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Use only under a chemical fume hood.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Methylene chloride | TWA: 50 ppm | (Vacated) TWA: 500 ppm<br>(Vacated) STEL: 2000 ppm<br>(Vacated) Ceiling: 1000 ppm<br>TWA: 25 ppm<br>STEL: 125 ppm | IDLH: 2300 ppm |
| Methyl alcohol | TWA: 200 ppm<br>STEL: 250 ppm<br>Skin | (Vacated) TWA: 200 ppm<br>(Vacated) TWA: 260 mg/m³<br>(Vacated) STEL: 250 ppm<br>(Vacated) STEL: 325 mg/m³<br>Skin<br>TWA: 200 ppm<br>TWA: 260 mg/m³ | IDLH: 6000 ppm<br>TWA: 200 ppm<br>TWA: 260 mg/m³<br>STEL: 250 ppm<br>STEL: 325 mg/m³ |
| Cyclohexene | TWA: 300 ppm | (Vacated) TWA: 300 ppm<br>(Vacated) TWA: 1015 mg/m³<br>TWA: 300 ppm<br>TWA: 1015 mg/m³ | IDLH: 2000 ppm<br>TWA: 300 ppm<br>TWA: 1015 mg/m³ |

| Component | Quebec | Mexico OEL (TWA) | Ontario TWAEV |
|---|---|---|---|
| Methylene chloride | TWA: 50 ppm<br>TWA: 174 mg/m³ | TWA: 100 ppm<br>TWA: 330 mg/m³<br>STEL: 500 ppm<br>STEL: 1740 mg/m³ | TWA: 50 ppm |
| Methyl alcohol | TWA: 200 ppm<br>TWA: 262 mg/m³<br>STEL: 250 ppm<br>STEL: 328 mg/m³<br>Skin | TWA: 200 ppm<br>TWA: 260 mg/m³<br>STEL: 250 ppm<br>STEL: 310 mg/m³ | TWA: 200 ppm<br>STEL: 250 ppm<br>Skin |
| Cyclohexene | TWA: 300 ppm<br>TWA: 1010 mg/m³ | TWA: 300 ppm<br>TWA: 1015 mg/m³ | TWA: 300 ppm |

*Legend*

*ACGIH - American Conference of Governmental Industrial Hygienists*
*OSHA - Occupational Safety and Health Administration*
*NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health*

**Engineering Measures** Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Liquid |
| **Appearance** | Colorless |
| **Odor** | sweet |
| **Odor Threshold** | No information available |
| **pH** | Not applicable |
| **Melting Point/Range** | -97 °C / -142.6 °F |
| **Boiling Point/Range** | 39 °C / 102.2 °F |
| **Flash Point** | No information available |

| | |
|---|---|
| **Evaporation Rate** | No information available |
| **Flammability (solid,gas)** | Not applicable |
| **Flammability or explosive limits** | |
| **Upper** | 23 vol % |
| **Lower** | 13 vol % |
| **Vapor Pressure** | 20 mmHg @ 3502°C |
| **Vapor Density** | 2.93 (Air = 1.0) |
| **Specific Gravity** | 1.33 |
| **Solubility** | No information available |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | 556 °C / 1032.8 °F |
| **Decomposition Temperature** | No information available |
| **Viscosity** | No information available |
| **Molecular Formula** | C H2 Cl2 |
| **Molecular Weight** | 84.93 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products. Excess heat.

**Incompatible Materials** Strong oxidizing agents, Strong acids, Amines

**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide ($CO_2$), Hydrogen chloride gas, Phosgene

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information**

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Methylene chloride | > 2000 mg/kg ( Rat ) | > 2000 mg/kg ( Rat ) | 53 mg/L ( Rat ) 6 h<br>76000 mg/m³ ( Rat ) 4 h |
| Methyl alcohol | LD50 = 6200 mg/kg ( Rat ) | LD50 = 15800 mg/kg ( Rabbit ) | 64000 ppm ( Rat ) 4 h<br>83.2 mg/L ( Rat ) 4 h |
| Cyclohexene | LD50 = 2400 µL/kg ( Rat ) | >200 mg/kg (Rat) | >21.6 mg/L/4h (rat) |
| 2-Methyl-2-butene | 700-2600 mg/kg ( Rat ) | >2000 mg/kg ( Rat ) | LC50 > 61000 ppm ( Rat ) 4 h |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** Irritating to eyes and skin

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Methylene chloride | 75-09-2 | Group 2A | Reasonably Anticipated | A3 | X | A3 |
| Methyl alcohol | 67-56-1 | Not listed | Not listed | Not listed | Not listed | Not listed |

| | | | | | | |
|---|---|---|---|---|---|---|
| Cyclohexene | 110-83-8 | Not listed | Not listed | Not listed | Not listed | Not listed |
| 2-Methyl-2-butene | 513-35-9 | Not listed | Not listed | Not listed | Not listed | Not listed |

*IARC: (International Agency for Research on Cancer)*

*IARC: (International Agency for Research on Cancer)*
*Group 1 - Carcinogenic to Humans*
*Group 2A - Probably Carcinogenic to Humans*
*Group 2B - Possibly Carcinogenic to Humans*

*NTP: (National Toxicity Program)*

*NTP: (National Toxicity Program)*
*Known - Known Carcinogen*
*Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen*

*ACGIH: (American Conference of Governmental Industrial Hygienists)*

*A1 - Known Human Carcinogen*
*A2 - Suspected Human Carcinogen*
*A3 - Animal Carcinogen*
*ACGIH: (American Conference of Governmental Industrial Hygienists)*

*Mexico - Occupational Exposure Limits - Carcinogens*

*Mexico - Occupational Exposure Limits - Carcinogens*
*A1 - Confirmed Human Carcinogen*
*A2 - Suspected Human Carcinogen*
*A3 - Confirmed Animal Carcinogen*
*A4 - Not Classifiable as a Human Carcinogen*
*A5 - Not Suspected as a Human Carcinogen*

**Mutagenic Effects** Mutagenic effects have occured in microorganisms.

**Reproductive Effects** Experiments have shown reproductive toxicity effects on laboratory animals.

**Developmental Effects** Developmental effects have occurred in experimental animals.

**Teratogenicity** No information available.

**STOT - single exposure** Central nervous system (CNS) Respiratory system
**STOT - repeated exposure** Liver Kidney Blood

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting
**Endocrine Disruptor Information** No information available

**Other Adverse Effects** Tumorigenic effects have been reported in experimental animals. See actual entry in RTECS for complete information.

## 12. Ecological information

**Ecotoxicity**

.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|
| Methylene chloride | EC50:>660 mg/L/96h | Pimephales promelas: LC50:193 mg/L/96h | EC50: 1 mg/L/24 h<br>EC50: 2.88 mg/L/15 min | EC50: 140 mg/L/48h |
| Methyl alcohol | Not listed | Pimephales promelas: LC50 > 10000 mg/L 96h | EC50 = 39000 mg/L 25 min<br>EC50 = 40000 mg/L 15 min<br>EC50 = 43000 mg/L 5 min | EC50 > 10000 mg/L 24h |
| Cyclohexene | Not listed | Poecillia reticulata: 7.1 mg/L/96h | Not listed | Daphnia: EC50: 5.3 mg/L/48h |
| 2-Methyl-2-butene | Not listed | Not listed | Not listed | EC50: = 3 mg/L, 48h (Daphnia magna) |

**Persistence and Degradability** Persistence is unlikely based on information available.
**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its volatility.

| Component | log Pow |
|---|---|
| Methylene chloride | 1.25 |
| Methyl alcohol | -0.74 |

| | |
|---|---|
| Cyclohexene | 3.27 |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| Component | RCRA - U Series Wastes | RCRA - P Series Wastes |
|---|---|---|
| Methylene chloride - 75-09-2 | U080 | - |
| Methyl alcohol - 67-56-1 | U154 | - |

## 14. Transport information

**DOT**

**UN-No** UN1593
**Proper Shipping Name** DICHLOROMETHANE
**Hazard Class** 6.1
**Packing Group** III

**TDG**

**UN-No** UN1593
**Proper Shipping Name** DICHLOROMETHANE
**Hazard Class** 6.1
**Packing Group** III

**IATA**

**UN-No** UN1593
**Proper Shipping Name** Dichloromethane
**Hazard Class** 6.1
**Packing Group** III

**IMDG/IMO**

**UN-No** UN1593
**Proper Shipping Name** Dichloromethane
**Hazard Class** 6.1
**Packing Group** III

## 15. Regulatory information

**All of the components in the product are on the following Inventory lists:** X = listed

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Methylene chloride | X | X | - | 200-838-9 | - | | X | X | X | X | X |
| Methyl alcohol | X | X | - | 200-659-6 | - | | X | X | X | X | X |
| Cyclohexene | X | X | - | 203-807-8 | - | | X | X | X | X | X |
| 2-Methyl-2-butene | X | X | - | 208-156-3 | - | | X | X | X | X | X |

**Legend:**
**X - Listed**
**E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.**
**F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.**
**N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.**
**P - Indicates a commenced PMN substance**
**R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.**
**S - Indicates a substance that is identified in a proposed or final Significant New Use Rule**
**T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.**
**XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).**
**Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.**
**Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.**

**U.S. Federal Regulations**

**TSCA 12(b)**

**SARA 313**

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---|---|---|---|
| Methylene chloride | 75-09-2 | >99.5 | 0.1 |
| Methyl alcohol | 67-56-1 | 0 - 0.4 | 1.0 |

**SARA 311/312 Hazard Categories**

| | |
|---|---|
| **Acute Health Hazard** | Yes |
| **Chronic Health Hazard** | Yes |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**CWA (Clean Water Act)**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Methylene chloride | - | - | X | X |

**Clean Air Act**

| Component | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|---|---|---|---|
| Methylene chloride | X | | - |
| Methyl alcohol | X | | - |

**OSHA** Occupational Safety and Health Administration

| Component | Specifically Regulated Chemicals | Highly Hazardous Chemicals |
|---|---|---|
| Methylene chloride | 125 ppm STEL<br>12.5 ppm Action Level<br>25 ppm TWA | - |

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Methylene chloride | 1000 lb 1 lb | - |
| Methyl alcohol | 5000 lb | - |

**California Proposition 65** This product contains the following proposition 65 chemicals

| Component | CAS-No | California Prop. 65 | Prop 65 NSRL | Category |
|---|---|---|---|---|
| Methylene chloride | 75-09-2 | Carcinogen | 200 µg/day<br>50 µg/day | Carcinogen |
| Methyl alcohol | 67-56-1 | Developmental | - | Developmental |

**U.S. State Right-to-Know Regulations**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Methylene chloride | X | X | X | X | X |
| Methyl alcohol | X | X | X | X | X |
| Cyclohexene | X | X | X | - | X |
| 2-Methyl-2-butene | X | X | X | - | - |

**U.S. Department of Transportation**

| | |
|---|---|
| Reportable Quantity (RQ): | Y |
| DOT Marine Pollutant | N |
| DOT Severe Marine Pollutant | N |

**U.S. Department of Homeland Security**
This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Canada**
**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

**WHMIS Hazard Class** D1B Toxic materials
D2A Very toxic materials



## 16. Other information

**Prepared By** Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Creation Date** 27-Jan-2010
**Revision Date** 02-Oct-2015
**Print Date** 02-Oct-2015
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Disclaimer**
**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of SDS**

# SAFETY DATA SHEET

Version 6.15
Revision Date 09/07/2024
Print Date 09/08/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : *tert*-Butyl methyl ether

Product Number : 306975
Brand : Sigma-Aldrich
Index-No. : 603-181-00-X
CAS-No. : 1634-04-4

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable liquids (Category 2), H225
Skin irritation (Category 2), H315

For the full text of the H-Statements mentioned in this Section, see Section 16.



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## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word Danger

Hazard Statements

| | |
|---|---|
| H225 | Highly flammable liquid and vapor. |
| H315 | Causes skin irritation. |

Precautionary Statements

| | |
|---|---|
| P210 | Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P264 | Wash skin thoroughly after handling. |
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| | | |
|---|---|---|
| Synonyms | : | MTBE<br>Methyl tert-butyl ether |
| Formula | : | $C_5H_{12}O$ |
| Molecular weight | : | 88.15 g/mol |
| CAS-No. | : | 1634-04-4 |
| EC-No. | : | 216-653-1 |
| Index-No. | : | 603-181-00-X |

| Component | Classification | Concentration |
|---|---|---|
| **tert-butyl methyl ether** | | |
| | Flam. Liq. 2; Skin Irrit. 2; H225, H315 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.



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## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Remove contact lenses.

**If swallowed**
After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Carbon dioxide (CO2) Foam Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides
Combustible.
Pay attention to flashback.
Vapors are heavier than air and may spread along floors.
Development of hazardous combustion gases or vapours possible in the event of fire.
Forms explosive mixtures with air at ambient temperatures.

### 5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information
Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.



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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.
Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb® ).
Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on protection against fire and explosion**
Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.

**Hygiene measures**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

**Storage class**
Storage class (TRGS 510): 3: Flammable liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**



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| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| tert-butyl methyl ether | 1634-04-4 | TWA | 50 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Confirmed animal carcinogen with unknown relevance to humans | | |
| | | PEL | 40 ppm<br>144 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |

## 8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 120 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

**Body Protection**
Flame retardant antistatic protective clothing.

**Respiratory protection**
Recommended Filter type: Filter type AX
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when vapours/aerosols are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains. Risk of explosion.



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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid<br>Color: colorless |
| b) | Odor | characteristic |
| c) | Odor Threshold | 0.053 ppm |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point: -108.6 °C (-163.5 °F) at 1,013 hPa |
| f) | Initial boiling point and boiling range | 55 - 56 °C 131 - 133 °F - lit. |
| g) | Flash point | -28 °C (-18 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 8.5 %(V)<br>Lower explosion limit: 1.6 %(V) |
| k) | Vapor pressure | 330 hPa at 25 °C (77 °F) - OECD Test Guideline 104 |
| l) | Vapor density | No data available |
| m) | Density | 0.74 g/cm3 at 25 °C (77 °F) - lit. |
| | Relative density | 0.7420 °C |
| n) | Water solubility | 42 g/l at 20 °C (68 °F) - OECD Test Guideline 105 |
| o) | Partition coefficient: n-octanol/water | log Pow: 1.06 at 20 °C (68 °F) - OECD Test Guideline 107 - Bioaccumulation is not expected. |
| p) | Autoignition temperature | 460 °C (860 °F) at 1013.0 hPa - DIN 51794 |
| q) | Decomposition temperature | Distillable in an undecomposed state at normal pressure. |
| r) | Viscosity | 0.409 mm2/s at 40 °C (104 °F) - OECD Test Guideline 114 -<br>0.464 mm2/s at 20 °C (68 °F) - OECD Test Guideline 114 - |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | none |

### 9.2 Other safety information

| | |
|---|---|
| Surface tension | 72.5 mN/m at 1.07g/l at 21.5 °C (70.7 °F) - Surface tension |



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## SECTION 10: Stability and reactivity

### 10.1 Reactivity
Vapors may form explosive mixture with air.

### 10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions
Violent reactions possible with:
Oxidizing agents
Strong acids
halogens
Strong bases

### 10.4 Conditions to avoid
Heat, flames and sparks.
Warming.

### 10.5 Incompatible materials
rubber, various plastics

### 10.6 Hazardous decomposition products
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - male and female - > 2,000 mg/kg
(OECD Test Guideline 401)
Symptoms: Nausea, Vomiting, Pulmonary failure possible after aspiration of vomit., Aspiration may cause pulmonary edema and pneumonitis.
LC50 Inhalation - Rat - male and female - 4 h - 85 mg/l - vapor

(OECD Test Guideline 403)
Symptoms: Possible damages:, mucosal irritations
LD50 Dermal - Rat - male and female - > 2,000 mg/kg
(OECD Test Guideline 402)

**Skin corrosion/irritation**
Skin - Rabbit
Result: Skin irritation - 4 h
(OECD Test Guideline 404)
Remarks: Drying-out effect resulting in rough and chapped skin.

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: No eye irritation



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(OECD Test Guideline 405)

**Respiratory or skin sensitization**
Maximization Test - Guinea pig
Result: negative
(OECD Test Guideline 406)

**Germ cell mutagenicity**
Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster lung cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
Test Type: Mutagenicity (mammal cell test): micronucleus.
Test system: mouse lymphoma cells
Metabolic activation: without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Test Type: unscheduled DNA synthesis assay
Species: Mouse
Cell type: Liver cells
Application Route: inhalation (vapor)
Method: OECD Test Guideline 486
Result: negative

Test Type: Micronucleus test
Species: Mouse
Cell type: Bone marrow
Application Route: inhalation (vapor)
Method: US-EPA
Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration.
Species: Rat
Cell type: Bone marrow
Application Route: inhalation (vapor)
Method: US-EPA
Result: negative

Test Type: Transgenic rodent somatic cell gene mutation assay
Species: Rat
Cell type: Bone marrow
Application Route: inhalation (vapor)
Method: OECD Test Guideline 488
Result: negative

**Carcinogenicity**



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IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

Repeated dose toxicity - Rat - male and female - Oral - 90 d - NOAEL (No observed adverse effect level) - 3,000 mg/kg
Remarks: Subchronic toxicity

RTECS: KN5250000
Nausea, Vomiting, Dizziness, Central nervous system depression, Aspiration or inhalation may cause chemical pneumonitis., MTBE (methyl-tert-butyl ether) is reported to metabolize to tert-butyl alcohol and formaldehyde by microsomal demethylation, MTBE (methyl-tert-butyl ether) should be considered a "potential human carcinogen" due to an increase in leydig interstitial cell tumors of testes in male rats and an increase in lymphomas, leukemias, and uterine sarcomas in female rats., In another unpublished study MTBE was shown to be carcinogenic due to "increased incidence of a rare type of kidney tumor" in male rats and an "increase in the incidence of hepatocellular adenomas" in female mice.
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Systemic effects:

After absorption of large quantities:

somnolence
Dizziness
agitation, spasms
CNS disorders
narcosis
Unconsciousness

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.



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## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | semi-static test LC50 - Menidia beryllina - 574 mg/l - 96 h<br>(OECD Test Guideline 203) |
| Toxicity to daphnia and other aquatic invertebrates | flow-through test EC50 - Americamysis bahia (Mysid) - 187 mg/l - 96 h<br>(US-EPA OPPTS 850.1035) |
| Toxicity to algae | static test IC50 - Pseudokirchneriella subcapitata (green algae) - 491 mg/l - 96 h |
| Toxicity to bacteria | static test EC10 - Pseudomonas putida - 710 mg/l - 18 h<br>Remarks: (ECHA) |
| Toxicity to fish(Chronic toxicity) | flow-through test NOEC - Pimephales promelas (fathead minnow) - 299 mg/l - 31 d<br>Remarks: (ECHA) |
| | flow-through test NOEC - Pimephales promelas (fathead minnow) - 450 mg/l - 31 d<br>Remarks: (ECHA) |
| Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) | flow-through test NOEC - Daphnia magna (Water flea) - 51 mg/l - 21 d<br>(OPPTS 850.1300) |

### 12.2 Persistence and degradability

| | |
|---|---|
| Biodegradability | aerobic - Exposure time 28 d<br>Result: 0 % - Not readily biodegradable.<br>(OECD Test Guideline 301D) |

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Cyprinus carpio (Carp) - 28 d<br>at 25 °C(tert-butyl methyl ether)<br><br>Bioconcentration factor (BCF): 1.5 |

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

No data available



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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**
UN number: 2398 Class: 3 Packing group: II
Proper shipping name: Methyl tert-butyl ether
Reportable Quantity (RQ): 1000 lbs
Poison Inhalation Hazard: No

**IMDG**
UN number: 2398 Class: 3 Packing group: II EMS-No: F-E, S-D
Proper shipping name: METHYL tert-BUTYL ETHER

**IATA**
UN number: 2398 Class: 3 Packing group: II
Proper shipping name: Methyl tert-butyl ether

## SECTION 15: Regulatory information

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| tert-butyl methyl ether | 1634-04-4 | 1000 | 1000 |

**SARA 304 Extremely Hazardous Substances Reportable Quantity**
This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**
This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Fire Hazard
Acute Health Hazard
Chronic Health Hazard

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:



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| | | |
|---|---|---|
| tert-butyl methyl ether | 1634-04-4 | >= 90 - <= 100 % |

**US State Regulations**

**Massachusetts Right To Know**

tert-butyl methyl ether 1634-04-4

**Pennsylvania Right To Know**

tert-butyl methyl ether 1634-04-4

**Maine Chemicals of High Concern**

tert-butyl methyl ether 1634-04-4

**Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

**Washington Chemicals of High Concern**

Product does not contain any listed chemicals

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16: Other information

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 6.15 Revision Date: 09/07/2024 Print Date: 09/08/2024



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# SAFETY DATA SHEET

Version 5.5
Revision Date 06/02/2016
Print Date 06/21/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : *m*-Xylene

Product Number : 95670
Brand : Sigma-Aldrich
Index-No. : 601-022-00-9

CAS-No. : 108-38-3

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 3), H226
Acute toxicity, Dermal (Category 4), H312
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Aspiration hazard (Category 1), H304
Acute aquatic toxicity (Category 3), H402
Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

| | |
|---|---|
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 + P312 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P331 | Do NOT induce vomiting. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Synonyms | : | 1,3-Dimethylbenzene |
| Formula | : | $C_8H_{10}$ |
| Molecular weight | : | 106.17 g/mol |
| CAS-No. | : | 108-38-3 |
| EC-No. | : | 203-576-3 |
| Index-No. | : | 601-022-00-9 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **m-Xylene** | | |
| | Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; Asp. Tox. 1; Aquatic Acute 3; Aquatic Chronic 3; H226, H304, H312, H315, H319, H335, H412 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
No data available

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Flammable liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| m-Xylene | 108-38-3 | TWA | 100.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Eye & Upper Respiratory Tract irritation<br>Central Nervous System impairment<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | STEL | 150.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Eye & Upper Respiratory Tract irritation<br>Central Nervous System impairment<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | TWA | 100.000000 ppm<br>435.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 150.000000 ppm<br>655.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 100.000000 ppm<br>435.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | The value in mg/m3 is approximate. | | |
| | | TWA | 100.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | STEL | 150.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section) | | |

| | | | | |
|---|---|---|---|---|
| | | Not classifiable as a human carcinogen | | |
| | | TWA | 100 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | STEL | 150 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | TWA | 100 ppm<br>435 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | The value in mg/m3 is approximate. | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| m-Xylene | 108-38-3 | Methylhippuric acids | 1.5g/g creatinine | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | End of shift (As soon as possible after exposure ceases) | | | |
| | | Methylhippuric acids | 1,500.0000 mg/g | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | | End of shift (As soon as possible after exposure ceases) | | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 30 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -48 °C (-54 °F) - lit. |
| f) | Initial boiling point and boiling range | 138 - 139 °C (280 - 282 °F) - lit. |
| g) | Flash point | 25.0 °C (77.0 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 7 %(V)<br>Lower explosion limit: 1.1 %(V) |
| k) | Vapour pressure | 8.0 hPa (6.0 mmHg) at 20.0 °C (68.0 °F)<br>21.3 hPa (16.0 mmHg) at 37.7 °C (99.9 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 0.868 g/mL at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 3.2 at 20 °C (68 °F) |
| p) | Auto-ignition temperature | 465.0 °C (869.0 °F)<br>528.0 °C (982.4 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |

t) Oxidizing properties No data available

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
Vapours may form explosive mixture with air.

**10.4 Conditions to avoid**
Heat, flames and sparks.

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - male - 6,602 mg/kg
(OECD Test Guideline 401)

LC50 Inhalation - Rat - male - 4 h - 6700 ppm
(Directive 67/548/EEC, Annex V, B.2.)

LD50 Dermal - Rabbit - male - 12,126 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Skin irritation - 24 h

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Severe eye irritation - 24 h

**Respiratory or skin sensitisation**
- Mouse
Result: Does not cause skin sensitisation.
(OECD Test Guideline 429)

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (m-Xylene)

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

**Specific target organ toxicity - single exposure**
Inhalation - May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
May be fatal if swallowed and enters airways.

**Additional Information**
RTECS: ZE2275000

Liver injury may occur., Kidney injury may occur., Blood disorders, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, narcosis, Lung irritation, chest pain, pulmonary edema, Central nervous system depression, Dermatitis, Gastrointestinal disturbance

Kidney -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | mortality LC50 - Fish - 11.23 mg/l - 96 h<br>(OECD Test Guideline 203) |
| Toxicity to daphnia and other aquatic invertebrates | Remarks: No data available |
| Toxicity to algae | Remarks: No data available |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

No data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1307 Class: 3 Packing group: III
Proper shipping name: Xylenes
Reportable Quantity (RQ): 1000 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 1307 Class: 3 Packing group: III EMS-No: F-E, S-D
Proper shipping name: XYLENES

**IATA**
UN number: 1307 Class: 3 Packing group: III
Proper shipping name: Xylenes

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| m-Xylene | 108-38-3 | 2007-07-01 |

**SARA 311/312 Hazards**
Fire Hazard, Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| m-Xylene | 108-38-3 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| m-Xylene | 108-38-3 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| m-Xylene | 108-38-3 | 2007-07-01 |

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Asp. Tox. | Aspiration hazard |
| Eye Irrit. | Eye irritation |
| Flam. Liq. | Flammable liquids |
| H226 | Flammable liquid and vapour. |

| | |
|---|---|
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 3 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.5 Revision Date: 06/02/2016 Print Date: 06/21/2016

# SAFETY DATA SHEET

Version 6.12
Revision Date 09/07/2024
Print Date 09/08/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Naphthalene

Product Number : 147141
Brand : Aldrich
Index-No. : 601-052-00-2
CAS-No. : 91-20-3

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable solids (Category 2), H228
Carcinogenicity (Category 2), H351
Short-term (acute) aquatic hazard (Category 1), H400



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Long-term (chronic) aquatic hazard (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word Warning

Hazard Statements

| | |
|---|---|
| H228 | Flammable solid. |
| H351 | Suspected of causing cancer. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary Statements

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P210 | Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | C10H8 |
| Molecular weight | : | 128.17 g/mol |
| CAS-No. | : | 91-20-3 |
| EC-No. | : | 202-049-5 |
| Index-No. | : | 601-052-00-2 |

| Component | Classification | Concentration |
|---|---|---|
| **Naphthalene** | | |
| | Flam. Sol. 2; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H228, H351, H400, H410 | <= 100 % |



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For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Call in physician.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

**If swallowed**
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Water Foam Carbon dioxide (CO2) Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides
Combustible.
Vapors are heavier than air and may spread along floors.
Forms explosive mixtures with air on intense heating.
Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information
Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.



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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Work under hood. Do not inhale substance/mixture.

**Advice on protection against fire and explosion**
Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.

**Hygiene measures**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Keep away from heat and sources of ignition.

**Storage class**
Storage class (TRGS 510): 4.1B: Flammable solid hazardous materials

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated



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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Naphthalene | 91-20-3 | TWA | 10 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |
| | | TWA | 10 ppm<br>50 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 15 ppm<br>75 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 10 ppm<br>50 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | PEL | 0.1 ppm<br>0.5 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
| | | Skin | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| Naphthalene | 91-20-3 | 1-Naphthol + 2-Naphthol | | | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | End of shift (As soon as possible after exposure ceases) | | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: Nitrile rubber



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Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

**Body Protection**
Flame retardant antistatic protective clothing.

**Respiratory protection**
Recommended Filter type: Filter A-(P3)
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains. Risk of explosion.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: flakes, granules<br>Color: white |
| b) | Odor | aromatic |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/ range: 80 - 82 °C (176 - 180 °F) - lit. |
| f) | Initial boiling point and boiling range | 218 °C 424 °F - lit. |
| g) | Flash point | 78.5 °C (173.3 °F) - closed cup - ISO 2719 |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | The substance or mixture is a flammable solid with the category 2. - Flammability (solids) |
| j) | Upper/lower flammability or | Upper explosion limit: 5.9 %(V)<br>Lower explosion limit: 0.9 %(V) |



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| | | |
|---|---|---|
| | explosive limits | |
| k) | Vapor pressure | 0.072 hPa at 20 °C (68 °F) - OECD Test Guideline 104 |
| l) | Vapor density | No data available |
| m) | Density | 1.08 g/cm3 at 24.7 °C (76.5 °F) - OECD Test Guideline 109 |
| | Relative density | No data available |
| n) | Water solubility | 0.0308 g/l at 25 °C (77 °F) - OECD Test Guideline 105 - slightly soluble |
| o) | Partition coefficient: n-octanol/water | log Pow: 3.4 at 25 °C (77 °F) - OECD Test Guideline 107 - Bioaccumulation is not expected. |
| p) | Autoignition temperature | 526 - 587 °C (979 - 1089 °F) at 1,013 hPa - DIN 51794 |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | none |

### 9.2 Other safety information

| | |
|---|---|
| Surface tension | 31.8 mN/m at 100.0 °C (212.0 °F) |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Forms explosive mixtures with air on intense heating.
A range from approx. 15 Kelvin below the flash point is to be rated as critical.
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

Violent reactions possible with:
Oxidizing agents
chromium(VI) oxide
benzoyl chloride
aluminium chloride
Risk of explosion with:
nitrogen oxides

### 10.4 Conditions to avoid

Heat, flames and sparks.
Strong heating.



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### 10.5 Incompatible materials
No data available

### 10.6 Hazardous decomposition products
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
Oral: No data available
LC50 Inhalation - Rat - male and female - 4 h - > 0.4 mg/l - vapor

(OECD Test Guideline 403)
LD50 Dermal - Rabbit - 20,000 mg/kg
Remarks: (RTECS)

**Skin corrosion/irritation**
Skin - Rabbit
Result: No skin irritation - 24 h
Remarks: (ECHA)

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: No eye irritation - 24 h
Remarks: (ECHA)

**Respiratory or skin sensitization**
Maximization Test - Guinea pig
Result: negative
(OECD Test Guideline 406)

**Germ cell mutagenicity**
Test Type: Mutagenicity (mammal cell test): chromosome aberration.
Test system: Chinese hamster ovary cells
Metabolic activation: Metabolic activation
Method: OECD Test Guideline 473
Result: positive
Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: unscheduled DNA synthesis assay
Species: Rat
Cell type: Liver cells
Application Route: Oral
Method: OECD Test Guideline 486
Result: negative



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Test Type: Micronucleus test
Species: Mouse
Cell type: Bone marrow
Application Route: Intraperitoneal
Method: US-EPA
Result: negative
Remarks: (ECHA)

**Carcinogenicity**
Suspected of causing cancer.

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Naphthalene)

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. (Naphthalene)

NTP: RAHC - Reasonably anticipated to be a human carcinogen (Naphthalene)

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. (Naphthalene)

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**11.2 Additional Information**

Repeated dose toxicity - Rat - male and female - Oral - 91 Days - NOAEL (No observed adverse effect level) - 200 mg/kg - LOAEL (Lowest observed adverse effect level) - 400 mg/kg

Repeated dose toxicity - Mouse - male and female - Oral - 90 Days - NOAEL (No observed adverse effect level) - 100 mg/kg

Repeated dose toxicity - Rat - male and female - Dermal - 90 Days - NOAEL (No observed adverse effect level) - 1,000 mg/kg

Repeated dose toxicity - Rat - male and female - inhalation (vapor) - 90 Days - NOAEL (No observed adverse effect level) - 300 mg/kg

RTECS: QJ0525000
Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., Naphthalene is retinotoxic and systemic absorption of its vapors above 15ppm, may result in:, cataracts,



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optic neuritis, corneal injury, Eye irritation, Ingestion may provoke the following symptoms:, hemolytic anemia, hemoglobinuria, Nausea, Headache, Vomiting, Gastrointestinal disturbance, Convulsions, anemia, Kidney injury may occur., Seizures., Coma.
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After absorption:

Headache
Stomach/intestinal disorders
Tremors
Convulsions
Changes in the blood count

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Heart -

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 1.6 mg/l - 96 h<br>(OECD Test Guideline 203) |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Daphnia magna (Water flea) - 2.16 mg/l - 48 h<br>(OECD Test Guideline 202) |
| Toxicity to algae | static test EC50 - Pseudokirchneriella subcapitata (green algae) - 2.96 mg/l - 4 h<br>(US-EPA)<br>Remarks: (ECHA) |
| Toxicity to fish(Chronic toxicity) | flow-through test LC50 - Oncorhynchus kisutch (coho salmon) - 2.1 mg/l - 96 h<br>Remarks: (ECHA) |
| | flow-through test NOEC - Oncorhynchus kisutch (coho salmon) - 0.37 mg/l - 40 Days<br>Remarks: (ECHA) |
| Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) | static test NOEC - Daphnia pulex (Water flea) - 0.59 mg/l - 125 d<br>Remarks: (ECHA) |



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### 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d
Result: 2 % - Not readily biodegradable.
(OECD Test Guideline 302C)

### 12.3 Bioaccumulative potential

Bioaccumulation Cyprinus carpio (Carp) - 56 d
at 25 °C(Naphthalene)

Bioconcentration factor (BCF): 36.5 - 168
(OECD Test Guideline 305)

Remarks: Bioaccumulation is unlikely.

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties

No data available

### 12.7 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**

UN number: 1334 Class: 4.1 Packing group: III
Proper shipping name: Naphthalene, refined
Reportable Quantity (RQ): 100 lbs
Marine pollutant: yes Poison Inhalation Hazard: No

**IMDG**

UN number: 1334 Class: 4.1 Packing group: III EMS-No: F-A, S-G
Proper shipping name: NAPHTHALENE, REFINED



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Marine pollutant : yes

**IATA**
UN number: 1334 Class: 4.1 Packing group: III
Proper shipping name: Naphthalene, refined

## SECTION 15: Regulatory information

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| Naphthalene | 91-20-3 | 100 | 100 |

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Fire Hazard
Acute Health Hazard
Chronic Health Hazard

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations**

**Massachusetts Right To Know**

Naphthalene 91-20-3

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

**Washington Chemicals of High Concern**

Product does not contain any listed chemicals

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.



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## SECTION 16: Other information

### Further information

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 6.12 Revision Date: 09/07/2024 Print Date: 09/08/2024



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# SAFETY DATA SHEET

**Revision Date** 03-May-2012 **Revision Number** 2

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**Product Identifier**

**Product Description:** **n-Butylbenzene**
**Cat No.** **107850000; 107850050; 107850500; 107852500**
**Synonyms** 1-Phenylbutane

**Relevant identified uses of the substance or mixture and uses advised against**

**Recommended Use** Laboratory chemicals
**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Acros Organics BVBA
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
**E-mail address** begel.sdsdesk@thermofisher.com

**Emergency Telephone Number**

For information in the US, call: 001-800-ACROS-01
For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99
Emergency Number, US: 001-201-796-7100

CHEMTREC Phone Number, US: 001-800-424-9300
CHEMTREC Phone Number, Europe: 001-703-527-3887

## SECTION 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

**REGULATION (EC) No 1272/2008**

| | |
|---|---|
| Flammable liquids. | Category 3 |

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

*For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16*

**R-phrase(s)** none

**Label Elements**

## SECTION 2. HAZARDS IDENTIFICATION



**Signal Word** **Warning**

**Hazard Statements**
H226 - Flammable liquid and vapor

**Precautionary Statements - EU (§28, 1272/2008)**
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

**Other Hazards**

No information available.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | EC-No. | Weight % | CAS-No | 67/548/EEC Classification | CLP Classification - Regulation (EC) No 1272/2008 | REACH No. |
|---|---|---|---|---|---|---|
| Butyl benzene<br>104-51-8 | EEC No. 203-209-7 | > 99 | 104-51-8 | - | Flam. Liq. 3 (H226) | - |

**For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16**

## SECTION 4. FIRST AID MEASURES

**Description of first aid measures**

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

**Ingestion** Do not induce vomiting. Clean mouth with water. Aspiration hazard. Get medical attention.

**Inhalation** Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Obtain medical attention.

**Notes to Physician** Treat symptomatically

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing media**

**Suitable Extinguishing Media**
Water spray. Carbon dioxide ($CO_2$). Dry chemical. Use water spray to cool unopened containers. chemical foam. Do not use a solid water stream as it may scatter and spread fire.

**Extinguishing media which must not be used for safety reasons**
No information available.

**Special hazards arising from the substance or mixture**

Combustible material. Flammable. Vapors may travel to source of ignition and flash back. Containers may explode when heated.

**Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

**Environmental precautions**

Prevent further leakage or spillage if safe to do so

**Methods and material for containment and cleaning up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## SECTION 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Use explosion-proof equipment. Use only non-sparking tools.

**Conditions for safe storage, including any incompatibilities**

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat and sources of ignition.

**Specific End Uses**

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

| | |
|---|---|
| **Exposure limits** | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| **Biological limit values** | This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies. |
| **Derived No Effect Level (DNEL)** | No information available. |
| **Predicted No Effect Concentration (PNEC)** | No information available. |

**Exposure controls**

| | |
|---|---|
| **Engineering Measures** | Ensure adequate ventilation, especially in confined areas |
| **Personal protective equipment** | |
| **Eye Protection** | Goggles |
| **Hand Protection** | Protective gloves |
| **Skin and body protection** | Wear appropriate protective gloves and clothing to prevent skin exposure |
| **Respiratory Protection** | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced |
| **Hygiene Measures** | Handle in accordance with good industrial hygiene and safety practice |
| **Environmental exposure controls** | No information available. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Physical State** | Liquid |
| **Appearance** | Colorless |
| **odor** | odorless |
| **pH** | No information available. |
| **Vapor Pressure** | 1.33 hPa @ 23 °C |
| **Vapor Density** | 4.6 |
| **Boiling Point/Range** | 183°C / 361.4°F@ 760 mmHg |
| **Melting Point/Range** | -88°C / -126.4°F |
| **Flash Point** | 59°C / 138.2°F |
| **Autoignition Temperature** | 412°C / 773.6°F |
| **Explosion Limits** | |
| **Lower** | 0.8 |
| **Upper** | 5.8 |
| **Water Solubility** | Insoluble |
| **Specific Gravity** | 0.860 |
| **Molecular Formula** | C10 H14 |
| **Molecular Weight** | 134.22 |

## SECTION 10. STABILITY AND REACTIVITY

**Reactivity**

**Chemical Stability**

Stable under normal conditions.

**Possibility of Hazardous Reactions**

| | |
|---|---|
| **Hazardous Polymerization** | Hazardous polymerization does not occur. |
| **Hazardous Reactions .** | No information available. |

**Conditions to Avoid**

Keep away from open flames, hot surfaces and sources of ignition, Incompatible products.

**Incompatible Materials**

Strong oxidizing agents, oxygen.

**Hazardous Decomposition Products**

Carbon monoxide (CO). Carbon dioxide ($CO_2$).

## SECTION 11. TOXICOLOGICAL INFORMATION

**Information on Toxicological Effects**

**Acute Toxicity**

| | |
|---|---|
| **Product Information** | No acute toxicity information is available for this product |

**Component Information**

**Chronic Toxicity**

| | |
|---|---|
| **Carcinogenicity** | There are no known carcinogenic chemicals in this product |
| **Sensitization** | No information available. |
| **Mutagenic Effects** | No information available |
| **Reproductive Effects** | No information available. |
| **Developmental Effects** | No information available. |
| **Target Organs** | No information available. |
| **Other Adverse Effects** | The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information |

**Endocrine Disruptor Information**

## SECTION 11. TOXICOLOGICAL INFORMATION

| Component | EU - Endocrine Disrupters Candidate List | EU - Endocrine Disruptors - Evaluated Substances | Japan - Endocrine Disruptor Information |
|---|---|---|---|
| Butyl benzene | Group III Chemical | | |

## SECTION 12. ECOLOGICAL INFORMATION

**Toxicity**

**Ecotoxicity effects** Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

**Persistence and degradability**

No information available

**Bioaccumulative potential**

No information available.

| Component | log Pow |
|---|---|
| Butyl benzene | 4.2 |

**Mobility in soil**

**Results of PBT and vPvB assessment**

**Other adverse effects**

No information available

## SECTION 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Waste from Residues / Unused Products** Dispose of in accordance with local regulations

**Contaminated Packaging** Empty containers should be taken to local recyclers for disposal

## SECTION 14. TRANSPORT INFORMATION

**IMDG/IMO**

## SECTION 14. TRANSPORT INFORMATION

| | |
|---|---|
| **UN-No** | 2709 |
| **Hazard Class** | 3 |
| **Packing Group** | III |
| **Proper Shipping Name** | BUTYLBENZENES |

**ADR**

| | |
|---|---|
| **UN-No** | 2709 |
| **Hazard Class** | 3 |
| **Packing Group** | III |
| **Proper Shipping Name** | BUTYLBENZENES |

**IATA**

| | |
|---|---|
| **UN-No** | 2709 |
| **Hazard Class** | 3 |
| **Packing Group** | III |
| **Proper Shipping Name** | BUTYLBENZENES |

## SECTION 15. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**International Inventories**

| Component | EINECS | ELINCS | NLP | TSCA | DSL | NDSL | PICCS | ENCS | CHINA | AICS | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Butyl benzene | 203-209-7 | - | | X | X | - | X | X | X | X | - |

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances
**ENCS** - Japan Existing and New Chemical Substances
**CHINA** - China Inventory of Existing Chemical Substances
**AICS** - Inventory of Chemical Substances
**KECL** - Existing and Evaluated Chemical Substances

**Chemical Safety Assessment**

## SECTION 16. OTHER INFORMATION

**Full text of R-phrases referred to under sections 2 and 3**
No information available.

**Revision Date** 03-May-2012
**Revision Summary**

**Reason for revision** Not applicable
**This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**
**Disclaimer**
**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of Safety Data Sheet**

# SAFETY DATA SHEET

**Creation Date** 04-Oct-2010 **Revision Date** 10-Feb-2015 **Revision Number** 1

## 1. Identification

**Product Name** **Nickel, powder**

**Cat No. :** **AC193610000; AC193610250; AC193611000; AC193615000**

**Synonyms** Raney alloy

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Entity / Business Name**
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number**
For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Skin Sensitization | Category 1 |
| Carcinogenicity | Category 2 |
| Specific target organ toxicity - (repeated exposure) | Category 1 |
| Target Organs - Kidney, Blood. | |

**Label Elements**

**Signal Word**
Danger

**Hazard Statements**
May cause an allergic skin reaction
Causes damage to organs through prolonged or repeated exposure
Suspected of causing cancer



**Precautionary Statements**

**Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Contaminated work clothing should not be allowed out of the workplace
**Response**
IF exposed or concerned: Get medical attention/advice
**Skin**
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
**Storage**
Store locked up
**Disposal**
Dispose of contents/container to an approved waste disposal plant
**Hazards not otherwise classified (HNOC)**
Harmful to aquatic life with long lasting effects

## 3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Nickel powder | 7440-02-0 | >95 |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.

**Ingestion** Do not induce vomiting. Call a physician or Poison Control Center immediately.

**Most important symptoms/effects** May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available
**Method -** No information available

**Autoignition Temperature** 400 °C / 752 °F
**Explosion Limits**
**Upper** No data available
**Lower** No data available

**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Combustible material.

**Hazardous Combustion Products**
Nickel oxides.
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 3 | 1 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Avoid dust formation.

**Environmental Precautions** Should not be released into the environment. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean Up** Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

## 7. Handling and storage

**Handling** Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Do not breathe vapors/dust. Do not ingest.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Nickel powder | TWA: 1.5 mg/m³ | (Vacated) TWA: 1 mg/m³<br>TWA: 1 mg/m³ | IDLH: 10 mg/m³<br>TWA: 0.015 mg/m³ |

| Component | Quebec | Mexico OEL (TWA) | Ontario TWAEV |
|---|---|---|---|
| Nickel powder | TWA: 1 mg/m³ | TWA: 1 mg/m³ | TWA: 1 mg/m³ |

*Legend*

*ACGIH - American Conference of Governmental Industrial Hygienists*
*OSHA - Occupational Safety and Health Administration*
*NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health*

**Engineering Measures** Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Solid |
| **Appearance** | Brown |
| **Odor** | Odorless |
| **Odor Threshold** | No information available |
| **pH** | No information available |
| **Melting Point/Range** | 1455 °C / 2651 °F |
| **Boiling Point/Range** | 2730 °C / 4946 °F |
| **Flash Point** | No information available |
| **Evaporation Rate** | No information available |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | 1 mmHg @ 1810 °C |
| **Vapor Density** | No information available |
| **Relative Density** | No information available |
| **Solubility** | No information available |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | 400 °C / 752 °F |
| **Decomposition Temperature** | No information available |
| **Viscosity** | No information available |
| **Molecular Formula** | Ni |
| **Molecular Weight** | 58.7 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products. Excess heat. Avoid dust formation.

**Incompatible Materials** Strong oxidizing agents

**Hazardous Decomposition Products** Nickel oxides

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Nickel powder | 9000 mg/kg ( Rat ) | Not listed | Not listed |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** May cause sensitization by skin contact Nickel and nickel compounds may cause a form of dermatitis known as nickel itch. May cause an allergic skin reaction

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Nickel powder | 7440-02-0 | Group 2B | Reasonably Anticipated | Not listed | X | Not listed |

*IARC: (International Agency for Research on Cancer)* *Group 2B - Possibly Carcinogenic to Humans*

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known
**STOT - repeated exposure** Kidney Blood

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
**Endocrine Disruptor Information** No information available

**Other Adverse Effects** See actual entry in RTECS for complete information.

## 12. Ecological information

**Ecotoxicity**
Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Do not empty into drains. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|
| Nickel powder | 0.18 mg/L EC50 = 72 h 0.174 - 0.311 mg/L EC50 96 h | 10.4 mg/L LC50 96 h 1.3 mg/L LC50 96 h 100 mg/L LC50 96 h | Not listed | 1 mg/L EC50 = 48 h 100 mg/L EC50 > 48 h |

**Persistence and Degradability** No information available
**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT**
- **UN-No** UN3089
- **Proper Shipping Name** METAL POWDERS, FLAMMABLE, N.O.S.
- **Hazard Class** 4.1
- **Packing Group** II

**TDG**
- **UN-No** UN3089
- **Proper Shipping Name** METAL POWDERS, FLAMMABLE, N.O.S.
- **Hazard Class** 4.1
- **Packing Group** II

**IATA**

| | |
|---|---|
| **UN-No** | 3089 |
| **Proper Shipping Name** | METAL POWDERS, FLAMMABLE, N.O.S. |
| **Hazard Class** | 4.1 |
| **Packing Group** | II |

**IMDG/IMO**

| | |
|---|---|
| **UN-No** | 3089 |
| **Proper Shipping Name** | METAL POWDERS, FLAMMABLE, N.O.S. |
| **Hazard Class** | 4.1 |
| **Packing Group** | II |

## 15. Regulatory information

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Nickel powder | X | X | - | 231-111-4 | - | | X | - | X | X | X |

**Legend:**
**X - Listed**
**E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.**
**F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.**
**N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.**
**P - Indicates a commenced PMN substance**
**R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.**
**S - Indicates a substance that is identified in a proposed or final Significant New Use Rule**
**T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.**
**XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).**
**Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.**
**Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.**

**U.S. Federal Regulations**

**TSCA 12(b)** Not applicable

**SARA 313**

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---|---|---|---|
| Nickel powder | 7440-02-0 | >95 | 0.1 |

**SARA 311/312 Hazardous Categorization**

| | |
|---|---|
| **Acute Health Hazard** | Yes |
| **Chronic Health Hazard** | Yes |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**Clean Water Act**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Nickel powder | - | - | X | X |

**Clean Air Act**

| Component | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|---|---|---|---|
| Nickel powder | X | | - |

**OSHA** Occupational Safety and Health Administration
Not applicable

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive

Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Nickel powder | 100 lb | - |

**California Proposition 65** This product contains the following Proposition 65 chemicals:

| Component | CAS-No | California Prop. 65 | Prop 65 NSRL | Category |
|---|---|---|---|---|
| Nickel powder | 7440-02-0 | Carcinogen | - | Carcinogen |

**State Right-to-Know**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Nickel powder | X | X | X | X | X |

**U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**
This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Canada**
**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

**WHMIS Hazard Class** D2A Very toxic materials



## 16. Other information

**Prepared By** Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Creation Date** 04-Oct-2010
**Revision Date** 10-Feb-2015
**Print Date** 10-Feb-2015
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Disclaimer**
**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of SDS**

# Safety Data Sheet
**acc. to OSHA HCS**

Printing date 03/28/2019 Version Number 3 Reviewed on 03/23/2019

* 

## 1 Identification

· **Product identifier**

· **Trade name: n-Propylbenzene Standard (1X1 mL)**

· **Part number:** EPA-1045-1
· **Application of the substance / the mixture** Reagents and Standards for Analytical Chemical Laboratory Use

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Agilent Technologies, Inc.
5301 Stevens Creek Blvd.
Santa Clara, CA 95051 USA

· **Information department:**
Telephone: 800-227-9770
e-mail: pdl-msds_author@agilent.com
· **Emergency telephone number:** CHEMTREC®: 1-800-424-9300

## 2 Hazard(s) identification

· **Classification of the substance or mixture**


GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.


GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.


GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.
STOT SE 1 H370 Causes damage to organs.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**


GHS02 GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
methanol
· **Hazard statements**
Highly flammable liquid and vapor.
Toxic if inhaled.
Suspected of causing cancer.

(Contd. on page 2)

# Safety Data Sheet
## acc. to OSHA HCS



**Trade name: n-Propylbenzene Standard (1X1 mL)**

(Contd. of page 1)

Causes damage to organs.

· **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
In case of fire: Use for extinction: CO2, powder or water spray.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**




Health = 1
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**




Health = *1
Fire = 3
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

| · **Dangerous components:** | | |
|---|---|---|
| 67-56-1 | methanol | 99.368% |
| 103-65-1 | propylbenzene | 0.632% |



(Contd. on page 3)

# Safety Data Sheet
## acc. to OSHA HCS



(Contd. of page 2)

## 4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Remove breathing apparatus only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
· **After inhalation:**
Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:** If symptoms persist consult doctor.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

## 5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
· **Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
· **Protective Action Criteria for Chemicals**

| · **PAC-1:** | | |
|---|---|---|
| 67-56-1 | methanol | 530 ppm |
| 103-65-1 | propylbenzene | 3.7 ppm |

(Contd. on page 4)

(Contd. of page 3)

| · **PAC-2:** | | |
|---|---|---|
| 67-56-1 | methanol | 2,100 ppm |
| 103-65-1 | propylbenzene | 41 ppm |

| · **PAC-3:** | | |
|---|---|---|
| 67-56-1 | methanol | 7200* ppm |
| 103-65-1 | propylbenzene | 240 ppm |

## 7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** Store in a cool location.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

| · **Components with limit values that require monitoring at the workplace:** | |
|---|---|
| **67-56-1 methanol** | |
| PEL | Long-term value: 260 mg/m³, 200 ppm |
| REL | Short-term value: 325 mg/m³, 250 ppm<br>Long-term value: 260 mg/m³, 200 ppm<br>Skin |
| TLV | Short-term value: 328 mg/m³, 250 ppm<br>Long-term value: 262 mg/m³, 200 ppm<br>Skin; BEI |

| · **Ingredients with biological limit values:** | |
|---|---|
| **67-56-1 methanol** | |
| BEI | 15 mg/L<br>Medium: urine<br>Time: end of shift<br>Parameter: Methanol (background, nonspecific) |

(Contd. on page 5)

# Safety Data Sheet
## acc. to OSHA HCS



(Contd. of page 4)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
· **Breathing equipment:**
When used as intended with Agilent instruments, the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.
Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device/equipment with appropriate organic or acid gas cartridge.
· **Protection of hands:**
Although not recommended for constant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.
· **Material of gloves**
For normal use: nitrile rubber, 11-13 mil thickness
For direct contact with the chemical: butyl rubber, 12-15 mil thickness
· **Penetration time of glove material**
For normal use: nitrile rubber: 1 hour
For direct contact with the chemical: butyl rubber: >4 hours
· **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

| | |
|---|---|
| · **Information on basic physical and chemical properties** | |
| · **General Information** | |
| · **Appearance:** | |
| **Form:** | Fluid |
| **Color:** | Colorless |
| · **Odor:** | Alcohol-like |
| · **Odor threshold:** | Not determined. |
| · **pH-value:** | Not determined. |
| · **Change in condition** | |
| **Melting point/Melting range:** | -98 °C (-144.4 °F) |
| **Boiling point/Boiling range:** | 64.7 °C (148.5 °F) |
| · **Flash point:** | 9 °C (48.2 °F) |
| · **Flammability (solid, gaseous):** | Not applicable. |

(Contd. on page 6)

(Contd. of page 5)

| | |
|---|---|
| · **Ignition temperature:** | 455 °C (851 °F) |
| · **Decomposition temperature:** | Not determined. |
| · **Auto igniting:** | Product is not selfigniting. |
| · **Danger of explosion:** | Product is not explosive. However, formation of explosive air/vapor mixtures are possible. |
| · **Explosion limits:** | |
| **Lower:** | 5.5 Vol % |
| **Upper:** | 44 Vol % |
| · **Vapor pressure at 20 °C (68 °F):** | 100 hPa (75 mm Hg) |
| · **Density at 20 °C (68 °F):** | 0.80063 g/cm³ (6.68126 lbs/gal) |
| · **Relative density** | Not determined. |
| · **Vapor density** | Not determined. |
| · **Evaporation rate** | Not determined. |
| · **Solubility in / Miscibility with** | |
| **Water:** | Not miscible or difficult to mix. |
| · **Partition coefficient (n-octanol/water):** | Not determined. |
| · **Viscosity:** | |
| **Dynamic:** | Not determined. |
| **Kinematic:** | Not determined. |
| · **Solvent content:** | |
| **Organic solvents:** | 100.0 % |
| **VOC content:** | 100.00 %<br>800.6 g/l / 6.68 lb/gal |
| **Solids content:** | 0.0 % |
| · **Other information** | No further relevant information available. |

## 10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

| · **LD/LC50 values that are relevant for classification:** | | |
|---|---|---|
| **ATE (Acute Toxicity Estimate)** | | |
| Inhalative | LC50/4 h | 3.02 mg/L |

(Contd. on page 7)

(Contd. of page 6)

| 67-56-1 methanol | | |
|---|---|---|
| Oral | LD50 | 5,628 mg/kg (rat) |
| Dermal | LD50 | 15,800 mg/kg (rabbit) |
| **103-65-1 propylbenzene** | | |
| Oral | LD50 | 6,040 mg/kg (rat) |

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic

· **Carcinogenic categories**

| · **IARC (International Agency for Research on Cancer)** |
|---|
| None of the ingredients is listed. |

| · **NTP (National Toxicology Program)** |
|---|
| None of the ingredients is listed. |

| · **OSHA-Ca (Occupational Safety & Health Administration)** |
|---|
| None of the ingredients is listed. |

## 12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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# Safety Data Sheet
## acc. to OSHA HCS



**Trade name: n-Propylbenzene Standard (1X1 mL)**

(Contd. of page 7)

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

* 
## 14 Transport information

| | |
|---|---|
| · **Not Regulated, De minimus Quantities** | - |
| · **UN-Number** | |
| · **DOT, IMDG, IATA** | UN1230 |
| · **UN proper shipping name** | |
| · **DOT** | Methanol solution |
| · **IMDG, IATA** | METHANOL solution |
| · **Transport hazard class(es)** | |
| · **DOT** |  |
| · **Class** | 3 Flammable liquids |
| · **Label** | 3, 6.1 |
| · **IMDG** |  |
| · **Class** | 3 Flammable liquids |
| · **Label** | 3/6.1 |
| · **IATA** |  |
| · **Class** | 3 Flammable liquids |
| · **Label** | 3 (6.1) |
| · **Packing group** | |
| · **DOT, IMDG, IATA** | II |
| · **Environmental hazards:** | Not applicable. |
| · **Special precautions for user** | Warning: Flammable liquids |
| · **Danger code (Kemler):** | 336 |
| · **EMS Number:** | F-E,S-D |
| · **Stowage Category** | B |
| · **Stowage Code** | SW2 Clear of living quarters. |
| · **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** | Not applicable. |

(Contd. on page 9)

# Safety Data Sheet
## acc. to OSHA HCS



(Contd. of page 8)

· **Transport/Additional information:**

· **DOT**

| | |
|---|---|
| · **Quantity limitations** | On passenger aircraft/rail: 1 L<br>On cargo aircraft only: 60 L |

· **IMDG**

| | |
|---|---|
| · **Limited quantities (LQ)** | 1L |
| · **Excepted quantities (EQ)** | Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml |
| · **UN "Model Regulation":** | UN 1230 METHANOL SOLUTION, 3 (6.1), II |

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

| | |
|---|---|
| 67-56-1 | methanol |

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

| | |
|---|---|
| 67-56-1 | methanol |

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.



(Contd. on page 10)

# Safety Data Sheet
## acc. to OSHA HCS



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## 16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

· **Department issuing SDS:** Document Control / Regulatory
· **Contact:** regulatory@ultrasci.com
· **Date of preparation / last revision** 03/28/2019 / 2
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Carc. 2: Carcinogenicity – Category 2
STOT SE 1: Specific target organ toxicity (single exposure) – Category 1
· *** Data compared to the previous version altered.**

# SAFETY DATA SHEET

Version 4.7
Revision Date 05/27/2015
Print Date 04/01/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : *o*-Cresol

Product Number : C85700
Brand : Sigma-Aldrich
Index-No. : 604-004-00-9

CAS-No. : 95-48-7

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Dermal (Category 3), H311
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H301 + H311 Toxic if swallowed or in contact with skin
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P260 Do not breathe dust or mist.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

| | |
|---|---|
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. |
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304 + P340 + P310 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. |
| P305 + P351 + P338 + P310 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| | | |
|---|---|---|
| Synonyms | : | 2-Methylphenol |
| Formula | : | $C_7H_8O$ |
| Molecular weight | : | 108.14 g/mol |
| CAS-No. | : | 95-48-7 |
| EC-No. | : | 202-423-8 |
| Index-No. | : | 604-004-00-9 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **o-Cresol** | | |
| | Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Aquatic Acute 2; Aquatic Chronic 2; H301 + H311, H314, H318, H411 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.Continue rinsing eyes during transport to hospital.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
No data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

Air and light sensitive. Keep in a dry place.
Storage class (TRGS 510): Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| o-Cresol | 95-48-7 | TWA | 5.000000 ppm 22.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | Remarks | Skin contact does contribute to exposure. | | |

| | | | | |
|---|---|---|---|---|
| | | TWA | 5.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Eye, skin, & Upper Respiratory Tract irritation<br>Adopted values or notations enclosed are those for which changes are proposed in the NIC<br>2010 Revision or addition to the notice of intended changes<br>See Notice of Intended Changes (NIC)<br>Danger of cutaneous absorption | | |
| | | TWA | 2.300000 ppm<br>10.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 20.000000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Not classifiable as a human carcinogen<br>Danger of cutaneous absorption | | |

**8.2 Exposure controls**

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 480 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.2 mm
Break through time: 30 min
Material tested:Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: powder<br>Colour: white |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | 4.5 at 25.00000 g/l |
| e) | Melting point/freezing point | Melting point/range: 29 - 31 °C (84 - 88 °F) - lit. |
| f) | Initial boiling point and boiling range | 191 °C (376 °F) - lit. |
| g) | Flash point | 81.0 °C (177.8 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 58 %(V)<br>Lower explosion limit: 1.3 %(V) |
| k) | Vapour pressure | 3.1 hPa (2.3 mmHg) at 60.0 °C (140.0 °F)<br>1.3 hPa (1.0 mmHg) at 38.2 °C (100.8 °F)<br>0.4 hPa (0.3 mmHg) at 20.0 °C (68.0 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 1.05 g/cm3 at 20.00 °C (68.00 °F) |
| n) | Water solubility | 25 g/l at 20 °C (68 °F) |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | 599.0 °C (1,110.2 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information

No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - 121.0 mg/kg
Remarks: Behavioral:Convulsions or effect on seizure threshold. Lungs, Thorax, or Respiration:Dyspnea. Gastrointestinal:Ulceration or bleeding from stomach.

LC50 Inhalation - Rat - 1 h - > 1,220 mg/m3
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Lacrimation. Behavioral:Somnolence (general depressed activity).

LD50 Dermal - Rabbit - 890.0 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Severe skin irritation - 24 h
(Draize Test)

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Severe eye irritation
(Draize Test)

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: GO6300000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Central nervous system depression, Diarrhoea, Gastrointestinal disturbance

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Leuciscus idus (Golden orfe) - 10.00 mg/l - 96 h |
| Toxicity to daphnia and other aquatic invertebrates | Immobilization EC50 - Daphnia magna (Water flea) - 15.8 mg/l - 48 h |
| Toxicity to algae | EC50 - SELENASTRUM - 100.00 mg/l - 72 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life with long lasting effects.

No data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3455 Class: 6.1 (8) Packing group: II
Proper shipping name: Cresols, solid
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 3455 Class: 6.1 (8) Packing group: II EMS-No: F-A, S-B
Proper shipping name: CRESOLS, SOLID

**IATA**
UN number: 3455 Class: 6.1 (8) Packing group: II
Proper shipping name: Cresols, solid

## 15. REGULATORY INFORMATION

**SARA 302 Components**
The following components are subject to reporting levels established by SARA Title III, Section 302:

| | CAS-No. | Revision Date |
|---|---|---|
| o-Cresol | 95-48-7 | 2007-07-01 |

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| o-Cresol | 95-48-7 | 2007-07-01 |

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| o-Cresol | 95-48-7 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| o-Cresol | 95-48-7 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| o-Cresol | 95-48-7 | 2007-07-01 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Eye Dam. | Serious eye damage |
| H301 | Toxic if swallowed. |
| H301 + H311 | Toxic if swallowed or in contact with skin |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Fire Hazard: | 2 |
| Reactivity Hazard: | 0 |

**Further information**
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**
Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.7 Revision Date: 05/27/2015 Print Date: 04/01/2016

# SAFETY DATA SHEET

Version 5.5
Revision Date 06/02/2016
Print Date 06/21/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : *o*-Xylene

Product Number : 95660
Brand : Sigma-Aldrich
Index-No. : 601-022-00-9

CAS-No. : 95-47-6

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 3), H226
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Aspiration hazard (Category 1), H304
Acute aquatic toxicity (Category 3), H402
Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 + H332 | Harmful in contact with skin or if inhaled |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |

| | |
|---|---|
| H335 | May cause respiratory irritation. |
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P210 | Keep away from heat/sparks/open flames/hot surfaces. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P331 | Do NOT induce vomiting. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Synonyms | : | 1,2-Dimethylbenzene |
| Formula | : | $C_8H_{10}$ |
| Molecular weight | : | 106.17 g/mol |
| CAS-No. | : | 95-47-6 |
| EC-No. | : | 202-422-2 |
| Index-No. | : | 601-022-00-9 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **o-Xylene** | | |
| | Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; Asp. Tox. 1; Aquatic Acute 3; Aquatic Chronic 3; H226, H304, H312 + H332, H315, H319, H335, H412 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
No data available

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Flammable liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| o-Xylene | 95-47-6 | TWA | 100.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Eye & Upper Respiratory Tract irritation<br>Central Nervous System impairment<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | STEL | 150.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Eye & Upper Respiratory Tract irritation<br>Central Nervous System impairment<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | TWA | 100.000000 ppm<br>435.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 100.000000 ppm<br>435.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 150.000000 ppm<br>655.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 100.000000 ppm<br>435.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | The value in mg/m3 is approximate. | | |
| | | TWA | 100.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | STEL | 150.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment | | |

| | | | | |
|---|---|---|---|---|
| | | Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | TWA | 100 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | STEL | 150 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | TWA | 100 ppm<br>435 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | The value in mg/m3 is approximate. | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| o-Xylene | 95-47-6 | Methylhippuric acids | 1,500.0000 mg/g | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | End of shift (As soon as possible after exposure ceases) | | | |
| | | Methylhippuric acids | 1.5g/g creatinine | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | | End of shift (As soon as possible after exposure ceases) | | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Nitrile rubber

Minimum layer thickness: 0.4 mm
Break through time: 30 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -26 - -23 °C (-15 - -9 °F) - lit. |
| f) | Initial boiling point and boiling range | 143 - 145 °C (289 - 293 °F) - lit. |
| g) | Flash point | 31.0 °C (87.8 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 6.7 %(V)<br>Lower explosion limit: 0.9 %(V) |
| k) | Vapour pressure | 21.3 hPa (16.0 mmHg) at 37.7 °C (99.9 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 0.879 g/mL at 20 °C (68 °F) |
| n) | Water solubility | 0.1705 g/l at 25 °C (77 °F) - partly soluble |
| o) | Partition coefficient: n-octanol/water | log Pow: 3.12 at 20 °C (68 °F) |
| p) | Auto-ignition temperature | 464.0 °C (867.2 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |

s) Explosive properties No data available

t) Oxidizing properties No data available

**9.2 Other safety information**

Surface tension 29.8 mN/m at 25.0 °C (77.0 °F)

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
Vapours may form explosive mixture with air.

**10.4 Conditions to avoid**
Heat, flames and sparks.

**10.5 Incompatible materials**
Oxidizing agents

**10.6 Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
No data available

LC50 Inhalation - Rat - male - 6 h - 18,800 mg/m3

Dermal: No data available

LD50 Intraperitoneal - Mouse - 1,364 mg/kg

**Skin corrosion/irritation**
Skin - Rabbit
Result: Irritating to skin. - 24 h

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
- Mouse
Result: Does not cause skin sensitisation.
(OECD Test Guideline 429)

**Germ cell mutagenicity**
Ames test
Salmonella typhimurium
Result: negative

**Carcinogenicity**

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (o-Xylene)

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
May be fatal if swallowed and enters airways.

**Additional Information**
RTECS: ZE2450000

narcosis, Lung irritation, chest pain, pulmonary edema, Central nervous system depression, Dermatitis, Gastrointestinal disturbance, Liver injury may occur., Kidney injury may occur., Blood disorders

Nerves. -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Lepomis macrochirus (Bluegill) - 16.10 mg/l - 96 h |

### 12.2 Persistence and degradability

| | |
|---|---|
| Biodegradability | aerobic - Exposure time 28 d<br>Result: 69.67 % - Not readily biodegradable.<br>(OECD Test Guideline 301F)<br>Remarks: The 10 day time window criterion is not fulfilled. |

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1307 Class: 3 Packing group: III
Proper shipping name: Xylenes
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 1307 Class: 3 Packing group: III EMS-No: F-E, S-D
Proper shipping name: XYLENES

**IATA**
UN number: 1307 Class: 3 Packing group: III
Proper shipping name: Xylenes

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| o-Xylene | 95-47-6 | 2007-07-01 |

**SARA 311/312 Hazards**
Fire Hazard, Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| o-Xylene | 95-47-6 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| o-Xylene | 95-47-6 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| o-Xylene | 95-47-6 | 2007-07-01 |

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Asp. Tox. | Aspiration hazard |
| Eye Irrit. | Eye irritation |
| Flam. Liq. | Flammable liquids |
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |

| | |
|---|---|
| H312 + H332 | Harmful in contact with skin or if inhaled |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | |
| Flammability: | 3 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.5 Revision Date: 06/02/2016 Print Date: 06/21/2016

# SAFETY DATA SHEET

Version 4.10
Revision Date 11/12/2015
Print Date 02/07/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : *p*-Cresol

Product Number : W233706
Brand : Aldrich
Index-No. : 604-004-00-9

CAS-No. : 106-44-5

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Dermal (Category 3), H311
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H301 + H311 Toxic if swallowed or in contact with skin
H314 Causes severe skin burns and eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P260 Do not breathe dust or mist.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

| | |
|---|---|
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. |
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER or doctor/ physician. |
| P322 | Specific measures (see supplemental first aid instructions on this label). |
| P361 | Remove/Take off immediately all contaminated clothing. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Synonyms : 4-Methylphenol

Formula : $C_7H_8O$

Molecular weight : 108.14 g/mol

CAS-No. : 106-44-5

EC-No. : 203-398-6

Index-No. : 604-004-00-9

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **p-Cresol** | | |
| | Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Aquatic Acute 2; Aquatic Chronic 2; H301 + H311, H314, H411 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.

hygroscopic Air and light sensitive. Handle and store under inert gas.

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| p-Cresol | 106-44-5 | TWA | 2.3 ppm<br>10 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 5 ppm<br>22 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | Remarks | Skin designation<br>The value in mg/m3 is approximate. | | |

| | | | | |
|---|---|---|---|---|
| | | TWA | 20 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Not classifiable as a human carcinogen<br>Danger of cutaneous absorption | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 480 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.2 mm
Break through time: 30 min
Material tested:Dermatril® P (KCL 743 / Aldrich Z677388, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: crystalline<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing | Melting point/range: 31 - 37 °C (88 - 99 °F) |

| | | |
|---|---|---|
| | point | Melting point/range: 32 - 34 °C (90 - 93 °F) - lit. |
| f) | Initial boiling point and boiling range | 202 °C (396 °F) - lit. |
| g) | Flash point | 85.0 °C (185.0 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Lower explosion limit: 1.1 %(V) |
| k) | Vapour pressure | 1.3 hPa (1.0 mmHg) at 20.0 °C (68.0 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 1.034 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 1.94 |
| p) | Auto-ignition temperature | 559.0 °C (1,038.2 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Oxidizing agents, Bases

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 207.0 mg/kg
Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes. Behavioral:Convulsions or effect on seizure threshold. Gastrointestinal:Ulceration or bleeding from stomach.

LC50 Inhalation - Rat - 1 h - > 710 mg/m3

LD50 Dermal - Rabbit - 301.0 mg/kg
Remarks: Behavioral:Tremor. Gastrointestinal:Changes in structure or function of salivary glands. Kidney, Ureter, Bladder:Other changes.

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Severe skin irritation - 24 h

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Severe eye irritation

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: GO6475000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, laryngitis, Dizziness, Cardiovascular effects., Muscle cramps/spasms., Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

Kidney -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - other fish - 16.00 - 24.00 mg/l - 24 h |
| | LC50 - Oncorhynchus mykiss (rainbow trout) - 7.9 mg/l - 96 h |
| Toxicity to daphnia and other aquatic invertebrates | LC50 - Daphnia magna (Water flea) - 1.4 mg/l - 48 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
Does not bioaccumulate.

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.

No data available

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3455 Class: 6.1 (8) Packing group: II
Proper shipping name: Cresols, solid
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 3455 Class: 6.1 (8) Packing group: II EMS-No: F-A, S-B
Proper shipping name: CRESOLS, SOLID

**IATA**
UN number: 3455 Class: 6.1 (8) Packing group: II
Proper shipping name: Cresols, solid

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| p-Cresol | 106-44-5 | 2007-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| p-Cresol | 106-44-5 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| p-Cresol | 106-44-5 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| p-Cresol | 106-44-5 | 2007-07-01 |

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Eye Dam. | Serious eye damage |
| H301 | Toxic if swallowed. |
| H301 + H311 | Toxic if swallowed or in contact with skin |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Chronic Health Hazard: | |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Fire Hazard: | 2 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.10 Revision Date: 11/12/2015 Print Date: 02/07/2016

# SAFETY DATA SHEET

Version 4.9
Revision Date 12/29/2015
Print Date 02/22/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Pentachlorophenol

Product Number : P2604
Brand : Aldrich
Index-No. : 604-002-00-8

CAS-No. : 87-86-5

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 2), H330
Acute toxicity, Dermal (Category 3), H311
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Carcinogenicity (Category 2), H351
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H301 + H311 Toxic if swallowed or in contact with skin
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H335 May cause respiratory irritation.

| | |
|---|---|
| H351 | Suspected of causing cancer. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P284 | Wear respiratory protection. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth. |
| P302 + P352 + P312 | IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P304 + P340 + P310 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $C_6HCl_5O$ |
| Molecular weight | : | 266.34 g/mol |
| CAS-No. | : | 87-86-5 |
| EC-No. | : | 201-778-6 |
| Index-No. | : | 604-002-00-8 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Pentachlorophenol** | | |
| | Acute Tox. 3; Acute Tox. 2; Acute Tox. 3; Skin Irrit. 2; Eye Irrit. 2A; Carc. 2; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 2; H301 + H311, H315, H319, H330, H335, H351, H400, H411 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Pentachlorophenol | 87-86-5 | TWA | 0.500000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Cardiac impairment<br>Adopted values or notations enclosed are those for which changes are proposed in the NIC<br>See Notice of Intended Changes (NIC)<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |
| | | TWA | 0.500000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential for dermal absorption | | |
| | | TWA | 0.500000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Skin designation | | |
| | | TWA | 0.5 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Cardiac impairment<br>2015 Adoption<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |
| | | STEL | 1 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Cardiac impairment<br>2015 Adoption<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Confirmed animal carcinogen with unknown relevance to humans<br>Danger of cutaneous absorption | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| Pentachlorophenol | 87-86-5 | pentachlorophenol | 2.0000 mg/g | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | Prior to last shift of workweek | | | |
| | | Free PCP | 5.0000 mg/l | In plasma | ACGIH - Biological Exposure Indices (BEI) |
| | | End of shift (As soon as possible after exposure ceases) | | | |
| | | pentachlorophenol | | Urine | ACGIH - Biological Exposure Indices (BEI) |

| | | |
|---|---|---|
| | | Prior to last shift of workweek |

### 8.2 Exposure controls

**Appropriate engineering controls**
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Splash contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 120 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: crystalline<br>Colour: light red |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 165 - 180 °C (329 - 356 °F) |
| f) | Initial boiling point and boiling range | 310 °C (590 °F) |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower | No data available |

| | | |
|---|---|---|
| | flammability or explosive limits | |
| k) | Vapour pressure | 53.3 hPa (40.0 mmHg) at 211.2 °C (412.2 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 1.978 g/mL at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 5.12 |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong oxidizing agents, Strong bases

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 27 mg/kg
Remarks: Vascular:BP elevation not charactertized in autonomic section. Endocrine:Hyperglycemia. Nutritional and Gross Metabolic:Changes in:Body temperature increase.

LC50 Inhalation - Rat - 355 mg/m3
Remarks: Behavioral:Excitement. Behavioral:Muscle contraction or spasticity. Lungs, Thorax, or Respiration:Dyspnea.

LD50 Dermal - Rat - 96.0 mg/kg
Remarks: Behavioral:Excitement. Behavioral:Muscle contraction or spasticity. Lungs, Thorax, or Respiration:Dyspnea.

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Open irritation test - 24.00 h

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Mild eye irritation - 24.00 h

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

The evidence for carcinogenicity of pentachlorophenol (PCP) is based on assays that utilized less than pure PCP. Contaminants of PCP include: tri- or tetra- chlorophenol, hexachlorobenzene, polychlorinated dibenzo-p-dioxins, or polychlorinated dibenzofurans. Indications are that positive evidence for carcinogenicity is from the contaminant(s) and not the PCP. This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (Pentachlorophenol) |
| NTP: | Reasonably anticipated to be a human carcinogen (Pentachlorophenol) |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

**Specific target organ toxicity - single exposure**
May cause respiratory irritation.

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

Convulsions

Kidney -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Cyprinodon variegatus (sheepshead minnow) - 0.16 - 0.5 mg/l - 96.0 h |
| | LC50 - Carassius auratus (goldfish) - 0.16 - 0.38 mg/l - 96.0 h |
| | LC50 - Oncorhynchus mykiss (rainbow trout) - 0.075 mg/l - 96.0 h |
| | NOEC - other fish - 0.01 mg/l - 24.0 h |
| | LOEC - other fish - 0.1 mg/l - 24.0 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 0.30 - 1.30 mg/l - 48 h |
| Toxicity to algae | EC50 - No information available. - 0.36 mg/l - 10 d |
| | EC50 - Chlorella vulgaris (Fresh water algae) - 10.30 mg/l - 96 h |
| | Growth inhibition EC50 - Scenedesmus quadricauda (Green algae) - 0.08 mg/l - 96 h |

**12.2 Persistence and degradability**

Biodegradability Result: 99 % - Biodegradable

**12.3 Bioaccumulative potential**

Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 144 h
- 0.0912 mg/l

Bioconcentration factor (BCF): 482

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**

UN number: 3155 Class: 6.1 Packing group: II
Proper shipping name: Pentachlorophenol
Reportable Quantity (RQ): 10 lbs

Poison Inhalation Hazard: No

**IMDG**

UN number: 3155 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: PENTACHLOROPHENOL
Marine pollutant: yes

**IATA**

UN number: 3155 Class: 6.1 Packing group: II
Proper shipping name: Pentachlorophenol

## 15. REGULATORY INFORMATION

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Pentachlorophenol | 87-86-5 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Pentachlorophenol | 87-86-5 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Pentachlorophenol | 87-86-5 | 2007-07-01 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| Pentachlorophenol | 87-86-5 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| Eye Irrit. | Eye irritation |
| H301 | Toxic if swallowed. |
| H301 + H311 | Toxic if swallowed or in contact with skin |
| H311 | Toxic in contact with skin. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H330 | Fatal if inhaled. |
| H335 | May cause respiratory irritation. |
| H351 | Suspected of causing cancer. |
| H400 | Very toxic to aquatic life. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 1 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 4 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.9 Revision Date: 12/29/2015 Print Date: 02/22/2016

# SAFETY DATA SHEET

**Creation Date** 01-May-2012 **Revision Date** 11-Aug-2014 **Revision Number** 1

## 1. Identification

**Product Name** **Phenanthrene**

**Cat No. :** **AC130090000; AC130090050; AC130090500; AC130095000**

**Synonyms** No information available

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Entity / Business Name**
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number**
For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Acute oral toxicity | Category 4 |

**Label Elements**

**Signal Word**
Warning

**Hazard Statements**
Harmful if swallowed



**Precautionary Statements**
**Prevention**
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
**Ingestion**
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

**Disposal**
Dispose of contents/container to an approved waste disposal plant
**Hazards not otherwise classified (HNOC)**
Very toxic to aquatic life with long lasting effects

## 3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Phenanthrene | 85-01-8 | >95 |

## 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact** Obtain medical attention. Wash off immediately with plenty of water for at least 15 minutes.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

**Most important symptoms/effects** None reasonably foreseeable.
**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available
**Method -** No information available

**Autoignition Temperature** Not applicable
**Explosion Limits**
**Upper** No data available
**Lower** No data available
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Do not allow run-off from fire fighting to enter drains or water courses.

**Hazardous Combustion Products**
Carbon monoxide (CO) Carbon dioxide ($CO_2$)
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 1 | 1 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean Up** Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

**Handling** Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

- **Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
- **Skin and body protection** Long sleeved clothing.
- **Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
- **Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Solid |
| **Appearance** | Beige |
| **Odor** | Odorless |
| **Odor Threshold** | No information available |
| **pH** | No information available |
| **Melting Point/Range** | 95 - 101 °C / 203 - 213.8 °F |
| **Boiling Point/Range** | 336 °C / 636.8 °F |
| **Flash Point** | No information available |
| **Evaporation Rate** | Not applicable |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | 1 mmHg @ 116 °C |
| **Vapor Density** | Not applicable |
| **Relative Density** | 1.063 |
| **Solubility** | Insoluble in water |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | Not applicable |
| **Decomposition temperature** | No information available |
| **Viscosity** | Not applicable |
| **Molecular Formula** | C14 H10 |
| **Molecular Weight** | 178.23 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products. Excess heat. Avoid dust formation.

**Incompatible Materials** Strong oxidizing agents

**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide ($CO_2$)

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information**

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Phenanthrene | 1.8 g/kg ( Rat ) | Not listed | Not listed |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Phenanthrene | 85-01-8 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

## 12. Ecological information

**Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| Phenanthrene | Not listed | LC50 = 3.2 mg/L 96h | Not listed | LC50 = 0.35 mg/L 48h |

**Persistence and Degradability** Insoluble in water May persist

**Bioaccumulation/ Accumulation** No information available.

**Mobility** . Is not likely mobile in the environment due its low water solubility.

| Component | log Pow |
|---|---|
| Phenanthrene | 4.46 |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT**

**UN-No** UN3077
**Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S.
**Hazard Class** 9
**Packing Group** III

**TDG**

**UN-No** UN3077
**Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE,SOLID, N.O.S.
**Hazard Class** 9
**Packing Group** III

**IATA**

**UN-No** UN3077
**Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.*
**Hazard Class** 9
**Packing Group** III

**IMDG/IMO**

**UN-No** UN3077
**Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
**Hazard Class** 9
**Packing Group** III

## 15. Regulatory information

**All of the components in the product are on the following Inventory lists:** X = listed

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Phenanthrene | X | X | - | 201-581-5 | - | | X | X | X | X | X |

**Legend:**
**X - Listed**
**E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.**
**F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.**
**N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.**
**P - Indicates a commenced PMN substance**
**R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.**
**S - Indicates a substance that is identified in a proposed or final Significant New Use Rule**
**T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.**
**XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).**
**Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.**
**Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.**

**U.S. Federal Regulations**

**TSCA 12(b)** Not applicable

**SARA 313**

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---|---|---|---|
| Phenanthrene | 85-01-8 | >95 | 1.0 |

**SARA 311/312 Hazardous Categorization**

| | |
|---|---|
| **Acute Health Hazard** | Yes |
| **Chronic Health Hazard** | No |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**Clean Water Act**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Phenanthrene | - | - | X | X |

**Clean Air Act** Not applicable

**OSHA** Occupational Safety and Health Administration
Not applicable

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Phenanthrene | 5000 lb | - |

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Phenanthrene | X | X | X | - | - |

**U.S. Department of Transportation**

| | |
|---|---|
| Reportable Quantity (RQ): | N |
| DOT Marine Pollutant | N |
| DOT Severe Marine Pollutant | N |

**U.S. Department of Homeland Security**
This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Canada**
**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

**WHMIS Hazard Class** Non-controlled

## 16. Other information

**Prepared By** Regulatory Affairs

Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

| | |
|---|---|
| **Creation Date** | 01-May-2012 |
| **Revision Date** | 11-Aug-2014 |
| **Print Date** | 11-Aug-2014 |
| **Revision Summary** | This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) |

**Disclaimer**

**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

## End of SDS

# SAFETY DATA SHEET

Version 6.10
Revision Date 09/06/2024
Print Date 09/06/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Phenol

Product Number : P5566
Brand : Sigma-Aldrich
Index-No. : 604-001-00-2
CAS-No. : 108-95-2

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 3), H331
Acute toxicity, Dermal (Category 3), H311



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Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Germ cell mutagenicity (Category 2), H341
Specific target organ toxicity - repeated exposure (Category 2), Nervous system, Kidney, Liver, Skin, H373
Short-term (acute) aquatic hazard (Category 2), H401
Long-term (chronic) aquatic hazard (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word: Danger

Hazard Statements

| | |
|---|---|
| H301 + H311 + H331 | Toxic if swallowed, in contact with skin or if inhaled. |
| H314 | Causes severe skin burns and eye damage. |
| H341 | Suspected of causing genetic defects. |
| H373 | May cause damage to organs (Nervous system, Kidney, Liver, Skin) through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |

Precautionary Statements

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P310 + P330 | IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth. |
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 + P310 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. |
| P305 + P351 + P338 + P310 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |



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### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Vesicant., Rapidly absorbed through skin.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : Hydroxybenzene

Formula : $C_6H_6O$
Molecular weight : 94.11 g/mol
CAS-No. : 108-95-2
EC-No. : 203-632-7
Index-No. : 604-001-00-2

| Component | Classification | Concentration |
|---|---|---|
| **Phenol** | | |
| | Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Muta. 2; STOT RE 2; Aquatic Acute 2; Aquatic Chronic 2; H301, H331, H311, H314, H318, H341, H373, H401, H411<br>Concentration limits:<br>>= 3 %: Skin Corr. 1B, H314; 1 - < 3 %: Skin Irrit. 2, H315; 1 - < 3 %: Eye Irrit. 2, H319; | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

**In case of skin contact**
After contact with skin: rinse out with polyethylene glycol 400 or a mixture of polyethylene glycol 300/ethanol 2:1 and wash with plenty of water. If neither is available wash with plenty of water. Immediately take off contaminated clothing. Call a physician immediately.



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**In case of eye contact**
After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

**If swallowed**
If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible. Do not attempt to neutralise.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Water Foam Carbon dioxide (CO2) Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides
Combustible.
Vapors are heavier than air and may spread along floors.
Forms explosive mixtures with air on intense heating.
Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information
Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.



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### 6.2 Environmental precautions
Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections
For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Work under hood. Do not inhale substance/mixture.

**Advice on protection against fire and explosion**
Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.

**Hygiene measures**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.
**Storage stability**Recommended storage temperature
2 - 8 °C
Handle and store under inert gas. Light sensitive.

**Storage class**
Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Phenol | 108-95-2 | TWA | 5 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Not classifiable as a human carcinogen | | |



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| | | | | |
|---|---|---|---|---|
| | | Danger of cutaneous absorption | | |
| | | TWA | 5 ppm<br>19 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential for dermal absorption | | |
| | | C | 15.6 ppm<br>60 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Potential for dermal absorption | | |
| | | TWA | 5 ppm<br>19 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Skin designation | | |
| | | PEL | 5 ppm<br>19 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
| | | Skin | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| Phenol | 108-95-2 | Phenol | 250mg/g creatinine | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | End of shift (As soon as possible after exposure ceases) | | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

**Skin protection**
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: Viton®
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please



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contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: Viton®
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

**Body Protection**
Flame retardant antistatic protective clothing.

**Respiratory protection**
Recommended Filter type: Filter A-(P3)
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when dusts/vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odor | stinging |
| c) | Odor Threshold | 0.005 ppm |
| d) | pH | 6.0 |
| e) | Melting point/freezing point | Melting point/ range: 38 - 43 °C (100 - 109 °F) |
| f) | Initial boiling point and boiling range | 181.8 °C 359.2 °F at 1,013 hPa |
| g) | Flash point | 79.0 °C (174.2 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 9.5 %(V)<br>Lower explosion limit: 1.3 %(V) |
| k) | Vapor pressure | 0.53 hPa at 20.0 °C (68.0 °F) |
| l) | Vapor density | 3.2 at 20 °C(68 °F) - (Air = 1.0) |
| m) | Density | 1.13 g/cm3 at 25 °C (77 °F) - DIN 51757 |
| | Relative density | No data available |



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| | | |
|---|---|---|
| n) | Water solubility | 87 g/l at 25 °C (77 °F) |
| o) | Partition coefficient: n-octanol/water | log Pow: 1.47 at 30 °C (86 °F) - (ECHA), Bioaccumulation is not expected. |
| p) | Autoignition temperature | 715 °C (1319 °F) at 1,013 hPa |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information

| | |
|---|---|
| Surface tension | 38.2 mN/m at 50.0 °C (122.0 °F) |
| Relative vapor density | 3.2 at 20 °C (68 °F) - (Air = 1.0) |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Forms explosive mixtures with air on intense heating.
A range from approx. 15 Kelvin below the flash point is to be rated as critical.
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .
Contains the following stabilizer(s):
Hypophosphorous acid (0.15 %)

### 10.3 Possibility of hazardous reactions

Exothermic reaction with:
Aluminum
Aldehydes
halogens
hydrogen peroxide
iron(III) compounds
Oxidizing agents
Strong acids
Strong bases
formaldehyde
Risk of explosion with:
nitrites
nitrates
salts of oxyhalogenic acids
peroxi compounds



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### 10.4 Conditions to avoid
Strong heating.

### 10.5 Incompatible materials
rubber, various plastics, various alloys, various metals

### 10.6 Hazardous decomposition products
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
Acute toxicity estimate Oral - 100.1 mg/kg
(Calculation method)
Acute toxicity estimate Oral - 100.1 mg/kg
(Expert judgment)
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Acute toxicity estimate Inhalation - 4 h - 0.51 mg/l - dust/mist(Calculation method)

Acute toxicity estimate Inhalation - 4 h - 0.51 mg/l - dust/mist

(Expert judgment)
Symptoms: Irritation, Lung edema
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)
Acute toxicity estimate Dermal - 660 mg/kg
(Calculation method)
LD50 Dermal - Rat - female - 660 mg/kg
(OECD Test Guideline 402)
No data available

**Skin corrosion/irritation**
Skin - In vitro study
Result: Causes burns.
(OECD Test Guideline 431)

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Corrosive
(OECD Test Guideline 405)
Remarks: Causes serious eye damage.
Risk of blindness!

**Respiratory or skin sensitization**
Sensitisation test: - Guinea pig
Result: negative
Remarks: (IUCLID)

**Germ cell mutagenicity**
Suspected of causing genetic defects.
Test Type: Mutagenicity (mammal cell test): chromosome aberration.
Test system: Chinese hamster ovary cells
Metabolic activation: Metabolic activation



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Method: OECD Test Guideline 473
Result: positive
Test Type: Mutagenicity (mammal cell test): micronucleus.
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 487
Result: positive

**Carcinogenicity**
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
May cause damage to organs through prolonged or repeated exposure.
- Nervous system, Kidney, Liver, Skin
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

**Aspiration hazard**
No data available

### 11.2 Additional Information

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Circulatory collapse, tachypnea, paralysis, Convulsions, Coma., necrosis of mouth and G.I. Tract, Jaundice, respiratory failure, cardiac arrest
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence

Stomach - Irregularities - Based on Human Evidence

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | flow-through test LC50 - Onchorhynchus clarki - 8.9 mg/l - 96 h |



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| | |
|---|---|
| | (US-EPA) |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Ceriodaphnia dubia (water flea) - 3.1 mg/l - 48 h<br>(US-EPA) |
| Toxicity to algae | static test EC50 - Pseudokirchneriella subcapitata (algae) - 61.1 mg/l - 96 h<br>(US-EPA) |
| Toxicity to bacteria | static test IC50 - microorganisms - 21 mg/l - 24 h<br>Remarks: (ECHA) |
| Toxicity to fish(Chronic toxicity) | semi-static test NOEC - Fish - 0.077 mg/l - 60 d<br>Remarks: (ECHA) |
| Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) | semi-static test NOEC - Daphnia magna (Water flea) - 0.16 mg/l - 16 d<br>Remarks: (ECHA) |

**12.2 Persistence and degradability**

| | |
|---|---|
| Biodegradability | aerobic - Exposure time 100 h<br>Result: 62 % - Readily biodegradable.<br>(OECD Test Guideline 301C) |

**12.3 Bioaccumulative potential**

| | |
|---|---|
| Bioaccumulation | Danio rerio (zebra fish) - 5 h<br>at 25 °C - 2 mg/l(Phenol)<br><br>Bioconcentration factor (BCF): 17.5<br>(OECD Test Guideline 305)<br><br>Remarks: Does not bioaccumulate. |

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Endocrine disrupting properties**

No data available

**12.7 Other adverse effects**

No data available



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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**
UN number: 1671 Class: 6.1 Packing group: II
Proper shipping name: Phenol, solid
Reportable Quantity (RQ): 1000 lbs
Poison Inhalation Hazard: No

**IMDG**
UN number: 1671 Class: 6.1 Packing group: II EMS-No: F-A, S-A
Proper shipping name: PHENOL, SOLID
Marine pollutant : yes

**IATA**
UN number: 1671 Class: 6.1 Packing group: II
Proper shipping name: Phenol, solid

## SECTION 15: Regulatory information

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| Phenol | 108-95-2 | 1000 | 1000 |

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| Phenol | 108-95-2 | 1000 | 1000 |

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

| Components | CAS-No. | Component TPQ (lbs) |
|---|---|---|
| Phenol | 108-95-2 | 10000 |
| Phenol | 108-95-2 | 500* |

*: Solid in the molten or powdered form (particles < 100 microns), in solution, or meeting the NFPA reactivity criteria

**SARA 311/312 Hazards** : Acute Health Hazard
Chronic Health Hazard



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**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

| | | |
|---|---|---|
| Phenol | 108-95-2 | >= 90 - <= 100 % |

**US State Regulations**

**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

**Washington Chemicals of High Concern**

Product does not contain any listed chemicals

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16: Other information

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 6.10 Revision Date: 09/06/2024 Print Date: 09/06/2024



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# SAFETY DATA SHEET

Version 3.10
Revision Date 03/03/2015
Print Date 02/07/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Potassium

Product Number : 244864
Brand : Aldrich

CAS-No. : 7440-09-7

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Substances and mixtures, which in contact with water, emit flammable gases (Category 1), H260
Skin corrosion (Category 1A), H314
Serious eye damage (Category 1), H318
Carcinogenicity (Category 1A), H350

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

| | |
|---|---|
| H260 | In contact with water releases flammable gases which may ignite spontaneously. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H350 | May cause cancer. |

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P223 | Keep away from any possible contact with water, because of violent reaction and possible flash fire. |

| | |
|---|---|
| P231 + P232 | Handle under inert gas. Protect from moisture. |
| P260 | Do not breathe dust or mist. |
| P264 | Wash skin thoroughly after handling. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P281 | Use personal protective equipment as required. |
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 + P310 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. |
| P305 + P351 + P338 + P310 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P335 + P334 | Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages. |
| P363 | Wash contaminated clothing before reuse. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |
| P402 + P404 | Store in a dry place. Store in a closed container. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Reacts violently with water.
May form explosive peroxides.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

Formula : K
Molecular weight : 39.10 g/mol

**Hazardous components**

| Component | | Classification | Concentration |
|---|---|---|---|
| **Potassium** | | | |
| CAS-No.<br>EC-No.<br>Index-No. | 7440-09-7<br>231-119-8<br>019-001-00-2 | Water-react. 1; Skin Corr. 1A; Eye Dam. 1; H260, H314 | >= 90 - <= 100 % |
| **Paraffin oils** | | | |
| CAS-No.<br>EC-No. | 8012-95-1<br>232-384-2 | Carc. 1A; H350 | >= 1 - < 5 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.Continue rinsing eyes during transport to hospital.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Dry powder

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Potassium oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No smoking.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.
Never allow product to get in contact with water during storage.

Handle and store under inert gas.
Storage class (TRGS 510): Hazardous materials, which set free flammable gases upon contact with water

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Paraffin oils | 8012-95-1 | STEL | 10.000000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 5.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 10.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 5.000000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Upper Respiratory Tract irritation<br>2014 Adoption<br>Not classifiable as a human carcinogen | | |
| | | Upper Respiratory Tract irritation<br>2014 Adoption<br>Exposure by all routes should be carefully controlled to levels as low as possible.<br>Suspected human carcinogen | | |
| | | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Upper Respiratory Tract irritation<br>Exposure by all routes should be carefully controlled to levels as low as possible.<br>Suspected human carcinogen | | |
| | | TWA | 5.000000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Not classifiable as a human carcinogen | | |
| | | TWA | 5.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 10.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Upper Respiratory Tract irritation<br>Exposure by all routes should be carefully controlled to levels as low as possible.<br>Suspected human carcinogen | | |

### 8.2 Exposure controls

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: Fragments<br>Colour: grey |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 64 °C (147 °F) |
| f) | Initial boiling point and boiling range | 774 °C (1,425 °F) at 1,013 hPa (760 mmHg) |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower | No data available |

| | | |
|---|---|---|
| | flammability or explosive limits | |
| k) | Vapour pressure | 0.12 hPa (0.09 mmHg) at 260 °C (500 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 0.860 g/cm3 |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
Reacts violently with water.

**10.4 Conditions to avoid**
Exposure to moisture

**10.5 Incompatible materials**
Oxidizing agents, Strong oxidizing agents, Carbon oxides, Reacts violently with water., Reacts with water to generate Hydrogen gas.

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
No data available

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: 1 - Group 1: Carcinogenic to humans (Paraffin oils)

NTP: Known to be human carcinogenThe reference note has been added by TD based on the background information of the NTP. (Paraffin oils)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**
No data available

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
No data available

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**

UN number: 2257 Class: 4.3 Packing group: I
Proper shipping name: Potassium
Reportable Quantity (RQ):

Poison Inhalation Hazard: No

**IMDG**
UN number: 2257 Class: 4.3 Packing group: I EMS-No: F-G, S-N
Proper shipping name: POTASSIUM

**IATA**
UN number: 2257 Class: 4.3 Packing group: I
Proper shipping name: Potassium
IATA Passenger: Not permitted for transport

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Potassium | 7440-09-7 | 1993-04-24 |
| Paraffin oils | 8012-95-1 | 2007-03-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Potassium | 7440-09-7 | 1993-04-24 |
| Paraffin oils | 8012-95-1 | 2007-03-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Potassium | 7440-09-7 | 1993-04-24 |
| Paraffin oils | 8012-95-1 | 2007-03-01 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| Paraffin oils | 8012-95-1 | 1987-02-27 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Carc. | Carcinogenicity |
| Eye Dam. | Serious eye damage |
| H260 | In contact with water releases flammable gases which may ignite spontaneously. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H350 | May cause cancer. |
| Skin Corr. | Skin corrosion |
| Water-react. | Substances and mixtures, which in contact with water, emit flammable gases |

**HMIS Rating**
Health hazard: 3

| | |
|---|---|
| Chronic Health Hazard: | * |
| Flammability: | 4 |
| Physical Hazard | 2 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Fire Hazard: | 4 |
| Reactivity Hazard: | 2 |
| Special hazard.I: | W |

**Further information**

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**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 3.10 Revision Date: 03/03/2015 Print Date: 02/07/2016

# SAFETY DATA SHEET

Version 3.9
Revision Date 05/23/2016
Print Date 06/21/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : *p*-Xylene

Product Number : 95680
Brand : Sigma-Aldrich
Index-No. : 601-022-00-9

CAS-No. : 106-42-3

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 3), H226
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Skin irritation (Category 2), H315
Acute aquatic toxicity (Category 2), H401

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)
H226 Flammable liquid and vapour.
H312 + H332 Harmful in contact with skin or if inhaled
H315 Causes skin irritation.
H401 Toxic to aquatic life.

Precautionary statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.

| | |
|---|---|
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P312 | Call a POISON CENTER/doctor if you feel unwell. |
| P322 | Specific measures (see supplemental first aid instructions on this label). |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Synonyms : 1,4-Dimethylbenzene

Formula : $C_8H_{10}$

Molecular weight : 106.17 g/mol

CAS-No. : 106-42-3

EC-No. : 203-396-5

Index-No. : 601-022-00-9

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **p-Xylene** | | |
| | Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Aquatic Acute 2; H226, H312 + H332, H315, H401 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
No data available

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| p-Xylene | 106-42-3 | TWA | 100.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Eye & Upper Respiratory Tract irritation | | |

| | | | | |
|---|---|---|---|---|
| | | Central Nervous System impairment<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | STEL | 150.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Eye & Upper Respiratory Tract irritation<br>Central Nervous System impairment<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | ST | 150.000000 ppm<br>655.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 100.000000 ppm<br>435.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 100.000000 ppm<br>435.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | The value in mg/m3 is approximate. | | |
| | | TWA | 100.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | STEL | 150.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | TWA | 100 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |
| | | STEL | 150 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Upper Respiratory Tract irritation<br>Eye irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Not classifiable as a human carcinogen | | |

| | | | | |
|---|---|---|---|---|
| | | TWA | 100 ppm<br>435 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | The value in mg/m3 is approximate. | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| p-Xylene | 106-42-3 | Methylhippuric acids | 1.5g/g creatinine | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | End of shift (As soon as possible after exposure ceases) | | | |
| | | Methylhippuric acids | 1,500.0000 mg/g | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | | End of shift (As soon as possible after exposure ceases) | | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 30 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid, clear<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | 13.0 °C (55.4 °F) |
| f) | Initial boiling point and boiling range | 137.0 - 138.0 °C (278.6 - 280.4 °F) |
| g) | Flash point | 25.0 °C (77.0 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 7 %(V)<br>Lower explosion limit: 1.1 %(V) |
| k) | Vapour pressure | 21.3 hPa (16.0 mmHg) at 37.7 °C (99.9 °F)<br>12.0 hPa (9.0 mmHg) at 20.0 °C (68.0 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 0.86 g/cm3 |
| n) | Water solubility | 0.2 g/l |
| o) | Partition coefficient: n-octanol/water | log Pow: 3.15 |
| p) | Auto-ignition temperature | 529.0 °C (984.2 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information

| | |
|---|---|
| Surface tension | 28.3 mN/m at 20.0 °C (68.0 °F) |

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
Vapours may form explosive mixture with air.

**10.4 Conditions to avoid**
Heat, flames and sparks.

### 10.5 Incompatible materials
Strong oxidizing agents

### 10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - 5,000 mg/kg

LD50 Oral - Rat - male - 3,523 mg/kg

LC50 Inhalation - Rat - 4 h - 4550 ppm
Remarks: Lungs, Thorax, or Respiration:Chronic pulmonary edema. Liver:Other changes. Blood:Changes in cell count (unspecified).

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Moderate skin irritation - 4 h

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

| | |
|---|---|
| IARC: | 3 - Group 3: Not classifiable as to its carcinogenicity to humans (p-Xylene) |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

May cause reproductive disorders.

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: ZE2625000

narcosis, Lung irritation, chest pain, pulmonary edema, Central nervous system depression, Gastrointestinal disturbance, Liver injury may occur., Kidney injury may occur., Blood disorders

Stomach - Irregularities - Based on Human Evidence
Stomach - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Oncorhynchus mykiss (rainbow trout) - 2.60 mg/l - 96 h |
| | LC50 - Carassius auratus (goldfish) - 18.00 mg/l - 24 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 35.50 - 63.10 mg/l - 48 h |
| Toxicity to algae | EC50 - Pseudokirchneriella subcapitata (green algae) - 3.20 - 4.40 mg/l - 72 h |

**12.2 Persistence and degradability**

Biodegradability Result: 87.8 % - Readily biodegradable

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**

UN number: 1307 Class: 3 Packing group: III
Proper shipping name: Xylenes
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**

UN number: 1307 Class: 3 Packing group: III EMS-No: F-E, S-D
Proper shipping name: XYLENES

**IATA**

UN number: 1307 Class: 3 Packing group: III
Proper shipping name: Xylenes

## 15. REGULATORY INFORMATION

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| p-Xylene | 106-42-3 | 2007-07-01 |

**SARA 311/312 Hazards**

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Flam. Liq. | Flammable liquids |
| H226 | Flammable liquid and vapour. |
| H312 | Harmful in contact with skin. |
| H312 + H332 | Harmful in contact with skin or if inhaled |
| H315 | Causes skin irritation. |
| H332 | Harmful if inhaled. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 1 |
| Chronic Health Hazard: | * |
| Flammability: | 3 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 1 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 0 |

**Further information**
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**
Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 3.9 Revision Date: 05/23/2016 Print Date: 06/21/2016

# SAFETY DATA SHEET

**Creation Date** 01-Jul-2010 **Revision Date** 10-Feb-2015 **Revision Number** 1

## 1. Identification

**Product Name** **Pyrene**

**Cat No. :** **AC180830000; AC180830250; AC180831000; AC180835000**

**Synonyms** Benzo[def]phenanthrene

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Entity / Business Name**
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number**
For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Skin Corrosion/irritation | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Central nervous system (CNS). | |
| Specific target organ toxicity - (repeated exposure) | Category 2 |
| Target Organs - Liver. | |

**Label Elements**

**Signal Word**
Warning

**Hazard Statements**
Causes skin irritation
Causes serious eye irritation
May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure



**Precautionary Statements**
**Prevention**
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Do not get in eyes, on skin, or on clothing
**Response**
Get medical attention/advice if you feel unwell
**Inhalation**
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
**Skin**
IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse
If skin irritation occurs: Get medical advice/attention
**Eyes**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
**Storage**
Store in a well-ventilated place. Keep container tightly closed
Store locked up
**Disposal**
Dispose of contents/container to an approved waste disposal plant
**Hazards not otherwise classified (HNOC)**
Very toxic to aquatic life with long lasting effects

## 3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Pyrene | 129-00-0 | >95 |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

**Ingestion** Do not induce vomiting. Obtain medical attention.

**Most important symptoms/effects** No information available.
**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable Extinguishing Media** No information available

| | |
|---|---|
| **Flash Point** | 210 °C / 410 °F |
| **Method -** | No information available |
| **Autoignition Temperature** | No information available |
| **Explosion Limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Sensitivity to Mechanical Impact** | No information available |
| **Sensitivity to Static Discharge** | No information available |

**Specific Hazards Arising from the Chemical**
Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**
Carbon monoxide (CO) Carbon dioxide ($CO_2$)
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 2 | 1 | 0 | N/A |

## 6. Accidental release measures

| | |
|---|---|
| **Personal Precautions** | Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. |
| **Environmental Precautions** | Should not be released into the environment. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage. |
| **Methods for Containment and Clean Up** | Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation. |

## 7. Handling and storage

| | |
|---|---|
| **Handling** | Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid ingestion and inhalation. |
| **Storage** | Keep containers tightly closed in a dry, cool and well-ventilated place. |

## 8. Exposure controls / personal protection

| | |
|---|---|
| **Exposure Guidelines** | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
| **Engineering Measures** | Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. |

**Personal Protective Equipment**

| | |
|---|---|
| **Eye/face Protection** | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. |
| **Skin and body protection** | Wear appropriate protective gloves and clothing to prevent skin exposure. |
| **Respiratory Protection** | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Solid |
| **Appearance** | Yellow |
| **Odor** | Odorless |
| **Odor Threshold** | No information available |
| **pH** | No information available |
| **Melting Point/Range** | 148 - 152 °C / 298 - 306 °F |
| **Boiling Point/Range** | 393 °C / 739.4 °F @ 760 mmHg |
| **Flash Point** | 210 °C / 410 °F |
| **Evaporation Rate** | No information available |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | No information available |
| **Vapor Density** | No information available |
| **Relative Density** | No information available |
| **Solubility** | No information available |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | No information available |
| **Decomposition Temperature** | No information available |
| **Viscosity** | No information available |
| **Molecular Formula** | C16 H10 |
| **Molecular Weight** | 202.25 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products. Excess heat. Avoid dust formation.

**Incompatible Materials** Strong oxidizing agents

**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide ($CO_2$)

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information** No acute toxicity information is available for this product

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Pyrene | 2700 mg/kg ( Rat ) | Not listed | Not listed |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** Irritating to eyes and skin

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Pyrene | 129-00-0 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Central nervous system (CNS)
**STOT - repeated exposure** Liver

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** Tumorigenic effects have been reported in experimental animals. The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

## 12. Ecological information

**Ecotoxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not empty into drains. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|
| Pyrene | Not listed | Oncorhynchus mykiss: LC50 > 2mg/L 96h | Not listed | EC50 48h 1.8 mg/L<br>EC50 48h 0.002-0.003 mg/L |

**Persistence and Degradability** No information available
**Bioaccumulation/ Accumulation** No information available.

**Mobility** .

| Component | log Pow |
|---|---|
| Pyrene | 4.88 |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT**

**UN-No** UN3077
**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s
**Proper technical name** Pyrene
**Hazard Class** 9
**Packing Group** III

**TDG**

**UN-No** UN3077
**Proper Shipping Name** Environmentally hazardous substance, solid, n.o.s.
**Hazard Class** 9
**Packing Group** III

**IATA**

| | |
|---|---|
| **UN-No** | UN3077 |
| **Proper Shipping Name** | Environmentally hazardous substance, solid, n.o.s |
| **Hazard Class** | 9 |
| **Packing Group** | III |

**IMDG/IMO**

| | |
|---|---|
| **UN-No** | UN3077 |
| **Proper Shipping Name** | Environmentally hazardous substance, solid, n.o.s |
| **Hazard Class** | 9 |
| **Packing Group** | III |

## 15. Regulatory information

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Pyrene | X | X | - | 204-927-3 | - | | X | X | X | X | - |

**Legend:**
**X - Listed**
**E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.**
**F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.**
**N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.**
**P - Indicates a commenced PMN substance**
**R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.**
**S - Indicates a substance that is identified in a proposed or final Significant New Use Rule**
**T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.**
**XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).**
**Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.**
**Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.**

**U.S. Federal Regulations**

**TSCA 12(b)** Not applicable

**SARA 313** Not applicable

**SARA 311/312 Hazardous Categorization**

| | |
|---|---|
| **Acute Health Hazard** | Yes |
| **Chronic Health Hazard** | Yes |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**Clean Water Act**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Pyrene | - | - | X | X |

**Clean Air Act** Not applicable

**OSHA** Occupational Safety and Health Administration
Not applicable

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Pyrene | 5000 lb | 5000 lb |

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Pyrene | X | X | X | X | - |

**U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

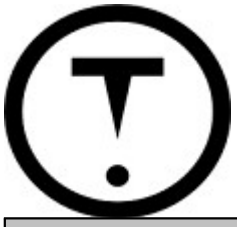
**U.S. Department of Homeland Security**
This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Canada**
**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

**WHMIS Hazard Class** D2B Toxic materials



## 16. Other information

**Prepared By**
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Creation Date** 01-Jul-2010
**Revision Date** 10-Feb-2015
**Print Date** 10-Feb-2015
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Disclaimer**
**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of SDS**

# SAFETY DATA SHEET

Version 6.7
Revision Date 10/27/2023
Print Date 07/13/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : *sec*-Butylbenzene

Product Number : B90408
Brand : Aldrich
CAS-No. : 135-98-8

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Flammable liquids (Category 3), H226
Acute toxicity, Oral (Category 4), H302
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram





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| | |
|---|---|
| Signal Word | Warning |
| Hazard statement(s) | |
| H226 | Flammable liquid and vapor. |
| H302 | Harmful if swallowed. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| Precautionary statement(s) | |
| P210 | Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P301 + P312 + P330 | IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P391 | Collect spillage. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| | | |
|---|---|---|
| Synonyms | : | 2-Phenylbutane |
| Formula | : | $C_{10}H_{14}$ |
| Molecular weight | : | 134.22 g/mol |
| CAS-No. | : | 135-98-8 |
| EC-No. | : | 205-227-0 |

| Component | Classification | Concentration |
|---|---|---|
| **sec-Butylbenzene** | | |
| | Flam. Liq. 3; Acute Tox. 4; Aquatic Acute 1; Aquatic Chronic 1; H226, H302, H400, H410<br>M-Factor - Aquatic Acute: 1 | <= 100 % |



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For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Remove contact lenses.

**If swallowed**
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Carbon dioxide (CO2) Foam Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides
Combustible.
Vapors are heavier than air and may spread along floors.
Forms explosive mixtures with air at elevated temperatures.
Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

### 5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.



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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.
Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb® ). Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on protection against fire and explosion**
Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.

**Hygiene measures**
Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

**Storage class**
Storage class (TRGS 510): 3: Flammable liquids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**
Contains no substances with occupational exposure limit values.



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## 8.2 Exposure controls

### Appropriate engineering controls

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

### Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### Body Protection

Flame retardant antistatic protective clothing.

#### Respiratory protection

Recommended Filter type: Filter type ABEK
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when vapours/aerosols are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

#### Control of environmental exposure

Do not let product enter drains. Risk of explosion.



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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid, clear<br>Color: colorless |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 75.5 °C (167.9 °F) - lit. |
| f) | Initial boiling point and boiling range | 173 - 174 °C 343 - 345 °F - lit. |
| g) | Flash point | 52.0 °C (125.6 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Lower explosion limit: 0.8 %(V) |
| k) | Vapor pressure | No data available |
| l) | Vapor density | No data available |
| m) | Density | 0.863 g/mL at 25 °C (77 °F) - lit. |
| | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Autoignition temperature | 418.0 °C (784.4 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information

No data available



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## SECTION 10: Stability and reactivity

### 10.1 Reactivity
Vapor/air-mixtures are explosive at intense warming.

### 10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions
Violent reactions possible with:
Strong oxidizing agents

### 10.4 Conditions to avoid
Heating.

### 10.5 Incompatible materials
various plastics

### 10.6 Hazardous decomposition products
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - 1,926 mg/kg
Remarks: (RTECS)
Inhalation: No data available
LD50 Dermal - Rabbit - > 13,760 mg/kg
Remarks: (RTECS)
No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Mild eye irritant - 24 h
Remarks: (RTECS)

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Mild eye irritation - 24 h
Remarks: (RTECS)

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is



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identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

RTECS: CY9100000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After absorption:

Headache
Nausea
narcosis

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to daphnia and other aquatic invertebrates | semi-static test EC50 - Daphnia magna (Water flea) - 0.6 mg/l - 48 h<br>(OECD Test Guideline 202)<br>Remarks: (in analogy to similar products) |
| Toxicity to algae | static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 0.42 mg/l - 72 h<br>(OECD Test Guideline 201)<br>Remarks: (in analogy to similar products) |
| | static test NOEC - Pseudokirchneriella subcapitata (green algae) - 0.26 mg/l - 72 h<br>(OECD Test Guideline 201)<br>Remarks: (in analogy to similar products) |



The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Endocrine disrupting properties**
No data available

**12.7 Other adverse effects**
Discharge into the environment must be avoided.

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

**Product**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**
UN number: 2709 Class: 3 Packing group: III
Proper shipping name: Butyl benzenes
Reportable Quantity (RQ):
Marine pollutant: yes Poison Inhalation Hazard: No

**IMDG**
UN number: 2709 Class: 3 Packing group: III EMS-No: F-E, S-D
Proper shipping name: BUTYLBENZENES
Marine pollutant : yes
Marine pollutant : yes

**IATA**
UN number: 2709 Class: 3 Packing group: III
Proper shipping name: Butylbenzenes



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## SECTION 15: Regulatory information

**SARA 302 Components**
This material does not contain any components with a section 302 EHS TPQ.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Fire Hazard, Acute Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| sec-Butylbenzene | 135-98-8 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| sec-Butylbenzene | 135-98-8 | 1993-04-24 |

## SECTION 16: Other information

**Further information**
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 6.7 Revision Date: 10/27/2023 Print Date: 07/13/2024



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operates as MilliporeSigma in the US and Canada

# SAFETY DATA SHEET

**Revision Date** 10-Feb-2015 **Revision Number** 1

## 1. Identification

**Product Name** **Selenium**

**Cat No. :** **AC419270000; AC419271000; AC419275000**

**Synonyms** None

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Entity / Business Name**
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number**
For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Acute oral toxicity | Category 3 |
| Acute Inhalation Toxicity - Dusts and Mists | Category 3 |
| Specific target organ toxicity - (repeated exposure) | Category 2 |

**Label Elements**

**Signal Word**
Danger

**Hazard Statements**
Toxic if swallowed
Toxic if inhaled
May cause damage to organs through prolonged or repeated exposure



**Precautionary Statements**
**Prevention**

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray

**Response**

Get medical attention/advice if you feel unwell

**Inhalation**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician

**Ingestion**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth

**Storage**

Store locked up
Store in a well-ventilated place. Keep container tightly closed

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

May cause long lasting harmful effects to aquatic life

## 3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Selenium | 7782-49-2 | > 99.5 |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

**Inhalation** Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Immediate medical attention is required.

**Ingestion** Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician immediately. If possible drink milk afterwards.

**Most important symptoms/effects** No information available.
**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Water spray. Carbon dioxide ($CO_2$). Dry chemical. chemical foam.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available
**Method -** No information available

**Autoignition Temperature** No information available
**Explosion Limits**
**Upper** No data available
**Lower** No data available
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**

Vapors may form explosive mixtures with air.

**Hazardous Combustion Products**
None known
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 3 | 0 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment.
**Environmental Precautions** See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean Up** Sweep up or vacuum up spillage and collect in suitable container for disposal.

## 7. Handling and storage

**Handling** Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Use only in area provided with appropriate exhaust ventilation.

**Storage** Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep under nitrogen.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|
| Selenium | TWA: 0.2 mg/m³ | (Vacated) TWA: 0.2 mg/m³ | IDLH: 1 mg/m³<br>TWA: 0.2 mg/m³ |

| Component | Quebec | Mexico OEL (TWA) | Ontario TWAEV |
|---|---|---|---|
| Selenium | TWA: 0.2 mg/m³ | TWA: 0.2 mg/m³ | TWA: 0.2 mg/m³ |

*Legend*

*ACGIH - American Conference of Governmental Industrial Hygienists*
*OSHA - Occupational Safety and Health Administration*
*NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health*

**Engineering Measures** Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Powder Solid |
| **Appearance** | Grey |
| **Odor** | No information available |
| **Odor Threshold** | No information available |
| **pH** | No information available |
| **Melting Point/Range** | 217 - 222 °C / 422.6 - 431.6 °F |
| **Boiling Point/Range** | 685 °C / 1265 °F |
| **Flash Point** | No information available |
| **Evaporation Rate** | No information available |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | 1 mmHg @ 345 °C |
| **Vapor Density** | No information available |
| **Relative Density** | 4.810 |
| **Solubility** | No information available |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | No information available |
| **Decomposition Temperature** | No information available |
| **Viscosity** | No information available |
| **Molecular Formula** | Se |
| **Molecular Weight** | 78.96 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products.

**Incompatible Materials** Acids, Strong oxidizing agents, Fluorine, oxygen, Metals

**Hazardous Decomposition Products** None under normal use conditions

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information** No acute toxicity information is available for this product

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Selenium | 6700 mg/kg ( Rat ) | Not listed | Not listed |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Selenium | 7782-49-2 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known
**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** No information available
**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity**
Do not empty into drains.

**Persistence and Degradability** No information available
**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT**
- **UN-No** UN3283
- **Hazard Class** 6.1
- **Packing Group** III

**TDG**
- **UN-No** UN3283
- **Hazard Class** 6.1
- **Packing Group** III

**IATA**
- **UN-No** 3283
- **Proper Shipping Name** SELENIUM COMPOUND, SOLID, N.O.S.
- **Hazard Class** 6.1
- **Packing Group** III

**IMDG/IMO**
- **UN-No** 3283
- **Proper Shipping Name** SELENIUM COMPOUND, SOLID, N.O.S.
- **Hazard Class** 6.1
- **Packing Group** III

## 15. Regulatory information

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Selenium | X | X | - | 231-957-4 | - | | X | - | X | X | X |

**Legend:**
**X - Listed**
**E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.**
**F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.**
**N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.**
**P - Indicates a commenced PMN substance**
**R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.**
**S - Indicates a substance that is identified in a proposed or final Significant New Use Rule**
**T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.**
**XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).**
**Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.**
**Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.**

## U.S. Federal Regulations

**TSCA 12(b)** Not applicable

**SARA 313**

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---|---|---|---|
| Selenium | 7782-49-2 | > 99.5 | 1.0 |

**SARA 311/312 Hazardous Categorization**

| | |
|---|---|
| **Acute Health Hazard** | Yes |
| **Chronic Health Hazard** | Yes |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**Clean Water Act**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Selenium | - | - | X | X |

**Clean Air Act** Not applicable

| Component | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|---|---|---|---|
| Selenium | X | | - |

**OSHA** Occupational Safety and Health Administration
Not applicable

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Selenium | 100 lb | - |

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Selenium | X | X | X | X | X |

**U.S. Department of Transportation**

| | |
|---|---|
| Reportable Quantity (RQ): | N |
| DOT Marine Pollutant | N |
| DOT Severe Marine Pollutant | N |

**U.S. Department of Homeland Security**
This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Canada**
**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

**WHMIS Hazard Class** D1A Very toxic materials
D2B Toxic materials



## 16. Other information

**Prepared By** Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Revision Date** 10-Feb-2015
**Print Date** 10-Feb-2015
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Disclaimer**
**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of SDS**

# SAFETY DATA SHEET — Semi-volatile Organics Standard

U.S. Department of Energy – Radiological and Environmental Sciences Laboratory **SDS DATE: 06/01/2015**

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** MAPEP Semi-Volatile Organics Performance Standard

**MANUFACTURER:** U.S. Department of Energy
**DIVISION:** Radiological and Environmental Sciences Laboratory
**ADDRESS:** Idaho Falls, ID 83401-4149

**EMERGENCY PHONE:** 208-526-2532
**CHEMTREC PHONE:** 208-526-1515
**FAX PHONE:** 208-526-2548

**CHEMICAL NAME:** water
**CHEMICAL FORMULA:** $H_2O$

**PRODUCT USE:** Performance Evaluation Program
**PREPARED BY:** Radiological and Environmental Sciences Laboratory

## SECTION 2: HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** May be harmful by inhalation, skin absorption or ingestion. Flush thoroughly with water for external contact.

**ROUTES OF ENTRY:** May be harmful by inhalation, skin absorption or ingestion.

**POTENTIAL HEALTH EFFECTS**
May be harmful by inhalation, ingestion, or skin adsorption. Can cause eye irritation. Can cause skin irritation. Can be irritating to mucous membrane.

**CARCINOGENICITY**
For the main component: water
**OSHA:** No **ACGIH:** No **NTP:** No **IARC:** No **NIOSH:** No **OTHER:** No

**SECTION 3 NOTES:** For the trace organic components
**OSHA:** No **ACGIH:** Yes **NTP:** Yes **IARC:** Yes **NIOSH:** Yes **OTHER:** Yes

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**INGREDIENT:** Trace organic constituents in methylene chloride.

| CAS NO. | | % WT | % VOL | SARA 313 REPORTABLE |
|---|---|---|---|---|
| 7732-18-5 | water | 100 | 100 | NO |
| Trace organics | | <1 | NA | NA |

**SECTION 3 NOTES:** Trace organics constitutes less than 1% composition by weight.

## SECTION 4: FIRST AID MEASURES

**In case of contact:**

**EYES:** Flush eyes continuously with water for 15 – 20 minutes.
**SKIN:** Flush skin continuously with water for 15 – 20 minutes. If no burns have occurred, use soap and water to cleanse skin.
**INGESTION:** Do not administer liquids or induce vomiting to an unconscious or convulsing person. Get medical attention immediately.
**INHALATION:** If inhaled, remove patient to fresh air.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** Administer oxygen if patient is having difficulty breathing. If patient has stopped breathing administer artificial respirations. If patient is in cardiac arrest administer CPR. Continue life supporting measures until medical assistance has arrived. Remove and wash contaminated clothing. If patient is exhibiting signs of shock – keep warm and quiet. If patient is vomiting – watch closely to makes sure airway does not become obstructed by vomit.

**SECTION 4 NOTES:** An antidotes is a substance intended to counteract the effect of a poison. It should be administered by a physician for trained emergency personnel. Medial advise can be obtained from a physician or trained emergency personnel. Medical advice can be obtained from POISON CONTROL CENTER.

## SECTION 5: FIRE-FIGHTING MEASURES

For the carrier – water.

Material will not burn.

**FLASH POINT:** non-flammable

**AUTOIGNITION TEMPERATURE:** Not available

**NFPA HAZARD CLASSIFICATION**
**HEALTH: 1** **FLAMMABILITY: 0** **REACTIVITY: 0**

**EXTINGUISHING MEDIA:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. Carbon dioxide, dry chemical or spray.

**SPECIAL FIRE FIGHTING PROCEDURES:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent) and full protect gear. Use water spray to keep fire-exposed containers cool. Substance is noncombustible.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**ACCIDENTAL RELEASE MEASURES:** Use proper personal protective equipment as indicated in Section 8.

**SECTION 6 NOTES:** For spills/leaks: Evacuate area. Wear appropriate OSHA regulated equipment. Ventilate area. Absorb spill with inert material, (e.g., dry sand, earth or vermiculite), then place into a chemical waste container. Hold for disposal.

## SECTION 7: HANDLING AND STORAGE

**HANDLING AND STORAGE:** This chemical should be handled only in a hood. Eye shields should be worn. Use appropriate OSHA/MSHA approved safety equipment. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling. STORE UNDER REFRIGERATION. Store only with compatible chemicals. Keep tightly closed.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**RESPIRATORY PROTECTION:** Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard 149 approved respirator when necessary.

**EYE PROTECTION:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**SKIN PROTECTION:** Wear appropriate protective gloves and clothing to prevent skin exposure.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

For the solvent water.

| | |
|---|---|
| **APPEARANCE:** | clear, colorless |
| **PHYSICAL STATE**: | Liquid |
| **pH AS SUPPLIED**: | 7 |
| **BOILING POINT:** | 100˚C |
| **MELTING POINT:** | 0˚C |
| **VAPOR PRESSURE (mmHg):** | 17.5 mm @ 20˚C |
| **VAPOR DENSITY (AIR = 1):** | not available |
| VISCOSITY: | 1 cP @ 20˚C |
| **SPECIFIC GRAVITY (H2O = 1):** | 1.0 @ 20˚C |
| **SOLUBILITY IN WATER:** | soluble in water. |
| **ODOR:** | none |
| **EVAPORATION RATE:** | not available |
| **MOLECULAR WEIGHT:** | 18.0134 |
| **CHEMICAL FORMULA:** | $H_2O$ |

## SECTION 10: STABILITY AND REACTIVITY

**STABILITY:** Stable under normal temperatures and pressures.

**CONDITIONS TO AVOID (STABILITY):** Freezing temperatures may rupture glass container.

**INCOMPATIBILITY (MATERIAL TO AVOID):** None.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** None.

**HAZARDOUS POLYMERIZATION:** Has not been reported.

## SECTION 11: TOXICOLOGICAL INFORMATION

For the main constituent water.
RTECS:
CAS# 7732-18-5: ZC0110000
Oral Rat LD50: >90 mL/kg
**CARCINOGENICITY**: Not listed by ACHIH, IARC, NIOSH, NTP or OSHA.
**EPIDEMIOLOGY**: No data available.
**TERATOGENICITY**: No data available.
**REPRODUCTIVE EFFECTS**: No data available.
**NEUROTOXICITY**: No data available.
**MUTAGENICITY**: No data available.
**OTHER STUDIES:** No data available.

**CARCINOGENICITY OF TRACE ORGANICS:**
**OSHA:** No **ACGIH:** Yes A3 **NTP:** Yes S **IARC:** Yes 2b **NIOSH:** Yes **OTHER:** No

## SECTION 12: ECOLOGICAL INFORMATION

**Environmental Fate:** No information found.

**Environmental Toxicity:** Not available

## SECTION 13: DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL METHOD:** Dispose of container and unused contents in accordance with federal, state and local requirements. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

## SECTION 14: TRANSPORT INFORMATION

**For the main component: WATER**
**UN Number:** No information available.
**CLASS:**
**PACKING GROUP:**

**Proper shipping name:** water

## SECTION 15: REGULATORY INFORMATION

**For the main component: WATER**

**US FEDERAL**

**TSCA**
CAS# 7732-18-5 is listed on the TSCA inventory.
**Health & Safety Reporting List**
None of the chemicals are on the Health & Safety Reporting List.
**Chemical Test Rules**
None of the chemicals in this product are under a Chemical Test Rule.
**Section 12b**
None of the chemicals are listed under TSCA Section 12b.
**TSCA Significant New Use Rule**
None of the chemicals in this material have a SNUR under TSCA.
**SARA**

**CERCLA Hazardous Substances and corresponding RQs**
None of the chemicals in this material have an RQ.
**SARA Section 302 Extremely Hazardous Substances**
Some of the trace chemicals in this product have a TPQ.
**Section 313**
Some of the trace chemicals in this standard are reportable under Section 313.
**Clean Air Act:**
This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.
**Clean Water Act:**
Some of the trace chemicals in this product are listed as Hazardous Substances under the CWA. All of the trace chemicals in this product are listed as Priority Pollutants under the CWA. Some of the trace chemicals in this product are listed as Toxic Pollutants under the CWA.
**OSHA:**
Some of the trace chemicals in this product are considered highly hazardous by OSHA.
**STATE**
CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
California No Significant Risk Level: Some of the trace chemicals in this product are listed.

**European/International Regulations**
**European Labeling in Accordance with EC Directives**
**Hazard Symbols:**
Not available.
**Risk Phrases:**

**Safety Phrases:**

**WGK (Water Danger/Protection)**
CAS# 7732-18-5: No information available.
**Canada - DSL/NDSL**
CAS# 7732-18-5 is listed on Canada's DSL List.
**Canada - WHMIS**
WHMIS: Not available.
**Canadian Ingredient Disclosure List**
**Exposure Limits**

## SECTION 16: OTHER INFORMATION

**OTHER INFORMATION:**
**NFPA Ratings: Health: 1 Flammability: 0 Reactivity: 0 Other:**

**Label Hazard Warning:** POISON! DANGER! CARCINOGEN!. MAY BE HARMFUL IF SWALLOWED OR INHALED. INHALATION MAY CAUSE LUNG DAMAGE.

**Label Precautions:**
Do not get in eyes, on skin, or on clothing.
Do not breathe vapor or mist.
Use only with adequate ventilation.
Wash thoroughly after handling.
Keep from contact with clothing and other combustible materials.
Store in a tightly closed container.
Remove and wash contaminated clothing promptly.

**Label First Aid:**
In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In all cases get medical attention immediately.

**PRODUCT USE:** Laboratory Use Only – RESEARCH.

Persons not specifically and properly trained should not handle this chemical or its container.

**DISCLAIMER: The US Department of Energy, Radiological and Environmental Sciences Laboratory provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.**

# SAFETY DATA SHEET

Version 4.6
Revision Date 12/02/2015
Print Date 02/09/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Silver

Product Number : 327093
Brand : Aldrich

CAS-No. : 7440-22-4

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

### 2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Formula : Ag
Molecular weight : 107.87 g/mol
CAS-No. : 7440-22-4
EC-No. : 231-131-3

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Silver** | | |
| | | <= 100 % |

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact**
Wash off with soap and plenty of water.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Silver/silver oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Avoid dust formation. Avoid breathing vapours, mist or gas.
For personal protection see section 8.

**6.2 Environmental precautions**
No special environmental precautions required.

**6.3 Methods and materials for containment and cleaning up**
Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.

Air sensitive. Store under inert gas. Keep in a dry place.
Storage class (TRGS 510): Non Combustible Solids

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Silver | 7440-22-4 | TWA | 0.010000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 0.010000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 0.100000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Argyria | | |
| | | TWA | 0.010000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 0.010000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 0.010000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 0.100000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Argyria | | |
| | | TWA | 0.010000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 0.1 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Argyria | | |
| | | TWA | 0.01 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |

## 8.2 Exposure controls

**Appropriate engineering controls**
General industrial hygiene practice.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
No special environmental precautions required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: powder |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 960 °C (1,760 °F) - lit. |
| f) | Initial boiling point and boiling range | 2,212 °C (4,014 °F) - lit. |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 10.49 g/cm3 |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

### 9.2 Other safety information
No data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity
No data available

### 10.2 Chemical stability
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Oxygen, Strong acids and strong bases

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - male - > 5,000 mg/kg

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

Carcinogenicity - Rat - Unreported
Tumorigenic:Tumors at site or application.

Carcinogenicity classification not possible from current data.

| | |
|---|---|
| IARC: | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

May cause argyria (a slate-gray or bluish discoloration of the skin and deep tissues due to the deposit of insoluble albuminate of silver).

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**
No data available

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

No data available

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Silver)
Reportable Quantity (RQ): 1 lbs

Poison Inhalation Hazard: No

**IMDG**
Not dangerous goods

**IATA**
Not dangerous goods

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Silver | 7440-22-4 | 1993-04-24 |

**SARA 311/312 Hazards**
No SARA Hazards

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Silver | 7440-22-4 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|

| | | |
|---|---|---|
| Silver | 7440-22-4 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Silver | 7440-22-4 | 1993-04-24 |

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Chronic Health Hazard: | |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.6 Revision Date: 12/02/2015 Print Date: 02/09/2016

Fisher Scientific

Part of Thermo Fisher Scientific

# SAFETY DATA SHEET

**Revision Date** 10-Feb-2015 **Revision Number** 1

## 1. Identification

**Product Name** **2-(2,4,5-Trichlorophenoxy)propionic acid**

**Cat No. :** **AC171700000; AC171700050**

**Synonyms** Silvex

**Recommended Use** Laboratory chemicals.

**Uses advised against** No Information available

**Details of the supplier of the safety data sheet**

**Company**
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

**Entity / Business Name**
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number**
For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Acute oral toxicity | Category 4 |
| Skin Corrosion/irritation | Category 2 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Carcinogenicity | Category 2 |

**Label Elements**

**Signal Word**
Warning

**Hazard Statements**
Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
Suspected of causing cancer



**Precautionary Statements**
**Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear eye/face protection
**Response**
IF exposed or concerned: Get medical attention/advice
**Skin**
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
**Eyes**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
**Ingestion**
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
**Storage**
Store locked up
**Disposal**
Dispose of contents/container to an approved waste disposal plant
**Hazards not otherwise classified (HNOC)**
Very toxic to aquatic life with long lasting effects

## 3. Composition / information on ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Silvex (2,4,5-TP) | 93-72-1 | 97 |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

**Inhalation** Remove from exposure, lie down. Move to fresh air. Obtain medical attention.

**Ingestion** Clean mouth with water. Get medical attention.

**Most important symptoms/effects** No information available.
**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Water spray. Carbon dioxide ($CO_2$). Dry chemical. chemical foam.

**Unsuitable Extinguishing Media** No information available

**Flash Point** No information available
**Method -** No information available

**Autoignition Temperature** No information available
**Explosion Limits**
**Upper** No data available
**Lower** No data available
**Sensitivity to Mechanical Impact** No information available
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**
Keep product and empty container away from heat and sources of ignition.

**Hazardous Combustion Products**
Hydrogen chloride gas Carbon monoxide (CO) Carbon dioxide ($CO_2$)
**Protective Equipment and Precautions for Firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 2 | 0 | 0 | N/A |

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment.
**Environmental Precautions** See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean Up** Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not let this chemical enter the environment.

## 7. Handling and storage

**Handling** Avoid contact with skin and eyes. Do not breathe dust. Do not breathe vapors or spray mist. Do not ingest.

**Storage** Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

## 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures** Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment**

**Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Powder Solid |
| **Appearance** | Beige |
| **Odor** | Slight |
| **Odor Threshold** | No information available |
| **pH** | No information available |
| **Melting Point/Range** | 177 - 181 °C / 350.6 - 357.8 °F |
| **Boiling Point/Range** | No information available |
| **Flash Point** | No information available |
| **Evaporation Rate** | No information available |
| **Flammability (solid,gas)** | No information available |
| **Flammability or explosive limits** | |
| **Upper** | No data available |
| **Lower** | No data available |
| **Vapor Pressure** | No information available |
| **Vapor Density** | No information available |
| **Relative Density** | 1.209 |
| **Solubility** | No information available |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | No information available |
| **Decomposition Temperature** | No information available |
| **Viscosity** | No information available |
| **Molecular Formula** | C9 H7 Cl3 O3 |
| **Molecular Weight** | 269.51 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products.

**Incompatible Materials** Strong oxidizing agents

**Hazardous Decomposition Products** Hydrogen chloride gas, Carbon monoxide (CO), Carbon dioxide ($CO_2$)

**Hazardous Polymerization** No information available.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information** No acute toxicity information is available for this product

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Silvex (2,4,5-TP) | 650 mg/kg ( Rat ) | 3200 mg/kg ( Rabbit ) | Not listed |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Silvex (2,4,5-TP) | 93-72-1 | Group 2B | Not listed | Not listed | X | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known
**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** No information available
**Endocrine Disruptor Information** No information available

**Other Adverse Effects** See actual entry in RTECS for complete information.

## 12. Ecological information

**Ecotoxicity**
Do not empty into drains.

**Persistence and Degradability** No information available
**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

**DOT** Not regulated
**TDG** Not regulated
**IATA**
- **UN-No** 3077
- **Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.*
- **Hazard Class** 9
- **Packing Group** III

**IMDG/IMO**
- **UN-No** 3077
- **Proper Shipping Name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
- **Hazard Class** 9
- **Packing Group** III

## 15. Regulatory information

**International Inventories**

| Component | TSCA | DSL | NDSL | EINECS | ELINCS | NLP | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Silvex (2,4,5-TP) | - | - | - | 202-271-2 | - | | X | X | - | - | - |

**Legend:**
**X - Listed**

**E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.**
**F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.**
**N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.**
**P - Indicates a commenced PMN substance**
**R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.**
**S - Indicates a substance that is identified in a proposed or final Significant New Use Rule**
**T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.**
**XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).**
**Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.**
**Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.**

## U.S. Federal Regulations

**TSCA 12(b)** Not applicable

**SARA 313** Not applicable

**SARA 311/312 Hazardous Categorization**

| | |
|---|---|
| **Acute Health Hazard** | Yes |
| **Chronic Health Hazard** | Yes |
| **Fire Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |
| **Reactive Hazard** | No |

**Clean Water Act**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Silvex (2,4,5-TP) | X | 100 lb | - | - |

**Clean Air Act** Not applicable

**OSHA** Occupational Safety and Health Administration
Not applicable

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Silvex (2,4,5-TP) | 100 lb | - |

**California Proposition 65** This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Silvex (2,4,5-TP) | X | X | X | X | - |

**U.S. Department of Transportation**

| | |
|---|---|
| Reportable Quantity (RQ): | N |
| DOT Marine Pollutant | N |
| DOT Severe Marine Pollutant | N |

**U.S. Department of Homeland Security**
This product does not contain any DHS chemicals.

## Other International Regulations

**Mexico - Grade** No information available

**Canada**

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR**

**WHMIS Hazard Class** D1B Toxic materials
D2B Toxic materials



## 16. Other information

**Prepared By** Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Revision Date** 10-Feb-2015
**Print Date** 10-Feb-2015
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

**Disclaimer**

**The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**

**End of SDS**

# SAFETY DATA SHEET

Version 4.11
Revision Date 03/05/2015
Print Date 02/07/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Sodium

Product Number : 483745
Brand : Aldrich

CAS-No. : 7440-23-5

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Substances and mixtures, which in contact with water, emit flammable gases (Category 1), H260
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Carcinogenicity (Category 1A), H350

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

| | |
|---|---|
| H260 | In contact with water releases flammable gases which may ignite spontaneously. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H350 | May cause cancer. |

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P223 | Keep away from any possible contact with water, because of violent reaction and possible flash fire. |

| | |
|---|---|
| P231 + P232 | Handle under inert gas. Protect from moisture. |
| P260 | Do not breathe dust or mist. |
| P264 | Wash skin thoroughly after handling. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P281 | Use personal protective equipment as required. |
| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 + P310 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician. |
| P305 + P351 + P338 + P310 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P335 + P334 | Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages. |
| P363 | Wash contaminated clothing before reuse. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |
| P402 + P404 | Store in a dry place. Store in a closed container. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Reacts violently with water.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

Formula : Na
Molecular weight : 22.99 g/mol

**Hazardous components**

| Component | | Classification | Concentration |
|---|---|---|---|
| **Sodium** | | | |
| CAS-No.<br>EC-No.<br>Index-No. | 7440-23-5<br>231-132-9<br>011-001-00-0 | Water-react. 1; Skin Corr. 1B; Eye Dam. 1; H260, H314 | >= 90 - <= 100 % |
| **Paraffin oils** | | | |
| CAS-No.<br>EC-No. | 8012-95-1<br>232-384-2 | Carc. 1A; H350 | >= 90 - <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.Continue rinsing eyes during transport to hospital.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Dry powder

**5.2 Special hazards arising from the substance or mixture**
No data available

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No smoking.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.
Never allow product to get in contact with water during storage.

Handle and store under inert gas. Air sensitive.
Storage class (TRGS 510): Hazardous materials, which set free flammable gases upon contact with water

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Paraffin oils | 8012-95-1 | STEL | 10.000000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 5.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 10.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 5.000000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Upper Respiratory Tract irritation<br>2014 Adoption<br>Not classifiable as a human carcinogen | | |
| | | Upper Respiratory Tract irritation<br>2014 Adoption<br>Exposure by all routes should be carefully controlled to levels as low as possible.<br>Suspected human carcinogen | | |
| | | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 5.000000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Upper Respiratory Tract irritation<br>Exposure by all routes should be carefully controlled to levels as low as possible.<br>Suspected human carcinogen | | |
| | | TWA | 5.000000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Not classifiable as a human carcinogen | | |
| | | TWA | 5.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 10.000000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | Upper Respiratory Tract irritation<br>Exposure by all routes should be carefully controlled to levels as low as possible.<br>Suspected human carcinogen | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: Pieces |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 97.8 °C (208.0 °F) - lit. |
| f) | Initial boiling point and boiling range | 883 °C (1,621 °F) - lit. |
| g) | Flash point | 82 °C (180 °F) |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 0.97 g/cm3 |

| | | |
|---|---|---|
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
Reacts violently with water.

**10.4 Conditions to avoid**
Air Do not allow water to enter container.
Exposure to moisture

**10.5 Incompatible materials**
Oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
No data available

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: 1 - Group 1: Carcinogenic to humans (Paraffin oils)

NTP: Known to be human carcinogenThe reference note has been added by TD based on the background information of the NTP. (Paraffin oils)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available
No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Aspiration may lead to:, lipid pneumonia, Effects due to ingestion may include:, laxative effect, Gastrointestinal disturbance, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**
No data available

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
No data available

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1428 Class: 4.3 Packing group: I
Proper shipping name: Sodium
Reportable Quantity (RQ): 10 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 1428 Class: 4.3 Packing group: I EMS-No: F-G, S-N
Proper shipping name: SODIUM

**IATA**
UN number: 1428 Class: 4.3 Packing group: I
Proper shipping name: Sodium
IATA Passenger: Not permitted for transport

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Reactivity Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Sodium | 7440-23-5 | 1993-04-24 |
| Paraffin oils | 8012-95-1 | 2007-03-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Sodium | 7440-23-5 | 1993-04-24 |
| Paraffin oils | 8012-95-1 | 2007-03-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Sodium | 7440-23-5 | 1993-04-24 |
| Paraffin oils | 8012-95-1 | 2007-03-01 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| Paraffin oils | 8012-95-1 | 1987-02-27 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Carc. | Carcinogenicity |
| Eye Dam. | Serious eye damage |
| H260 | In contact with water releases flammable gases which may ignite spontaneously. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H350 | May cause cancer. |
| Skin Corr. | Skin corrosion |
| Water-react. | Substances and mixtures, which in contact with water, emit flammable gases |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Chronic Health Hazard: | * |
| Flammability: | 4 |
| Physical Hazard | 2 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Fire Hazard: | 4 |
| Reactivity Hazard: | 2 |
| Special hazard.I: | W |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.11 Revision Date: 03/05/2015 Print Date: 02/07/2016

# SAFETY DATA SHEET

Version 3.5
Revision Date 11/04/2015
Print Date 02/22/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : *tert*-Butylbenzene

Product Number : B90602
Brand : Aldrich

CAS-No. : 98-06-6

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 3), H226
Eye irritation (Category 2A), H319
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)
H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.

| | |
|---|---|
| P264 | Wash skin thoroughly after handling. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |
| P391 | Collect spillage. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Synonyms : 2-Methyl-2-phenylpropane

Formula : $C_{10}H_{14}$

Molecular weight : 134.22 g/mol

CAS-No. : 98-06-6

EC-No. : 202-632-4

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **tert-Butylbenzene** | | |
| | Flam. Liq. 3; Eye Irrit. 2A; Aquatic Acute 2; Aquatic Chronic 2; H226, H319, H411 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid, clear<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -58 °C (-72 °F) - lit. |
| f) | Initial boiling point and boiling range | 169 °C (336 °F) - lit. |
| g) | Flash point | 34.0 °C (93.2 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower | Lower explosion limit: 0.8 %(V) |

| | | |
|---|---|---|
| | flammability or explosive limits | |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 0.867 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 3.80 |
| p) | Auto-ignition temperature | 450.0 °C (842.0 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
Vapours may form explosive mixture with air.

**10.4 Conditions to avoid**
Heat, flames and sparks.

**10.5 Incompatible materials**
Strong oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 3,045 mg/kg
Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Tremor. Gastrointestinal:Changes in structure or function of salivary glands.

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: CY9120000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC0 - Leuciscus idus (Golden orfe) - 44 mg/l - 48.0 h |
| | LC50 - Leuciscus idus (Golden orfe) - 65 mg/l - 48.0 h |
| Toxicity to daphnia and other aquatic invertebrates | LC50 - Daphnia magna (Water flea) - 41 mg/l - 24 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2709 Class: 3 Packing group: III
Proper shipping name: Butyl benzenes
Marine pollutant:yes
Poison Inhalation Hazard: No

**IMDG**
UN number: 2709 Class: 3 Packing group: III EMS-No: F-E, S-D
Proper shipping name: BUTYLBENZENES
Marine pollutant:yes

**IATA**
UN number: 2709 Class: 3 Packing group: III
Proper shipping name: Butylbenzenes

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Fire Hazard, Acute Health Hazard

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| tert-Butylbenzene | 98-06-6 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| tert-Butylbenzene | 98-06-6 | 1993-04-24 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Eye Irrit. | Eye irritation |
| Flam. Liq. | Flammable liquids |

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H319 | Causes serious eye irritation. |
| H401 | Toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | |
| Flammability: | 3 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 3.5 Revision Date: 11/04/2015 Print Date: 02/22/2016

# SAFETY DATA SHEET

Version 8.10
Revision Date 09/06/2024
Print Date 09/07/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : Tetrachloroethylene

Product Number : 371696
Brand : Sigma-Aldrich
Index-No. : 602-028-00-4
CAS-No. : 127-18-4

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Skin sensitization (Category 1), H317



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Carcinogenicity (Category 2), H351
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
Short-term (acute) aquatic hazard (Category 2), H401
Long-term (chronic) aquatic hazard (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word: Warning

Hazard Statements

| | |
|---|---|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |
| H411 | Toxic to aquatic life with long lasting effects. |

Precautionary Statements

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P261 | Avoid breathing mist or vapors. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P272 | Contaminated work clothing must not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none



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## SECTION 3: Composition/information on ingredients

### 3.1 Substances

| | | |
|---|---|---|
| Synonyms | : | Perchloroethylene<br>PCE |
| Formula | : | $C_2Cl_4$ |
| Molecular weight | : | 165.83 g/mol |
| CAS-No. | : | 127-18-4 |
| EC-No. | : | 204-825-9 |
| Index-No. | : | 602-028-00-4 |

| Component | Classification | Concentration |
|---|---|---|
| **Tetrachlorethylene** | | |
| | Skin Irrit. 2; Eye Irrit. 2A; Skin Sens. 1; Carc. 2; STOT SE 3; Aquatic Acute 2; Aquatic Chronic 2; H315, H319, H317, H351, H336, H401, H411<br>Concentration limits:<br>>= 20 %: STOT SE 3, H336; | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Call in physician.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

**If swallowed**
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11



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### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Water Foam Carbon dioxide (CO2) Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides
Hydrogen chloride gas
Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information
Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions
Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb® ). Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections
For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.



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**Hygiene measures**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

**Storage class**
Storage class (TRGS 510): 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Tetrachlorethylene | 127-18-4 | TWA | 25 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Confirmed animal carcinogen with unknown relevance to humans | | |
| | | STEL | 100 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Confirmed animal carcinogen with unknown relevance to humans | | |
| | | Potential Occupational Carcinogen | | |



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| | | | | |
|---|---|---|---|---|
| | | TWA | 100 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | CEIL | 200 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Peak | 300 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | PEL | 25 ppm<br>170 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
| | | STEL | 100 ppm<br>685 mg/m3 | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
| | | C | 300 ppm | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| Tetrachlorethylene | 127-18-4 | Tetrachloroethylene | 3parts per million | In end-exhaled air | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | Prior to shift (16 hours after exposure ceases) | | | |
| | | Tetrachloroethylene | 0.5 mg/l | In blood | ACGIH - Biological Exposure Indices (BEI) |
| | | Prior to shift (16 hours after exposure ceases) | | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Full contact
Material: Viton®
Minimum layer thickness: 0.7 mm



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Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).
Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.4 mm
Break through time: 240 min
Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

**Body Protection**
protective clothing

**Respiratory protection**
Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.
required when vapours/aerosols are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid, clear<br>Color: colorless |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/ range: -22 °C (-8 °F) - lit. |
| f) | Initial boiling point and boiling range | 121 °C 250 °F - lit. |
| g) | Flash point | ()No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower | No data available |



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| | | |
|---|---|---|
| | flammability or explosive limits | |
| k) | Vapor pressure | 25.3 hPa at 25.0 °C (77.0 °F)<br>17.3 hPa at 20.0 °C(68.0 °F) |
| l) | Vapor density | No data available |
| m) | Density | 1.623 g/cm3 at 25 °C (77 °F) - lit. |
| | Relative density | No data available |
| n) | Water solubility | 0.15 g/l at 25 °C (77 °F) |
| o) | Partition coefficient: n-octanol/water | log Pow: 2.53 at 23 °C (73 °F) - Bioaccumulation is not expected. |
| p) | Autoignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**

| | |
|---|---|
| Surface tension | 32.1 mN/m at 20 °C (68 °F) |

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
The product is chemically stable under standard ambient conditions (room temperature) .

**10.3 Possibility of hazardous reactions**
Risk of explosion with:
Alkali metals
Aluminum
sodium amide
Barium
nitrogen dioxide
Oxygen
with
alkali hydroxides
Exothermic reaction with:
strong alkalis
Alkaline earth metals
strong alkalis
Light metals
Powdered metals



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Oxidizing agents
Strong acids
Strong bases
nitrous gases
Risk of ignition or formation of inflammable gases or vapours with:
zinc oxide
with
Aluminum

### 10.4 Conditions to avoid
no information available

### 10.5 Incompatible materials
various plastics

### 10.6 Hazardous decomposition products
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**
LD50 Oral - Rat - male and female - 3,420 mg/kg
(OECD Test Guideline 401)
Remarks: (ECHA)
Inhalation: No data available
Dermal: No data available
No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Skin irritation - 4 h
(OECD Test Guideline 404)
Remarks: (ECHA)

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Mild eye irritation - 24 h
(Draize Test)
Remarks: (RTECS)

**Respiratory or skin sensitization**
Local lymph node assay (LLNA) - Mouse
Result: May cause sensitization by skin contact.
(OECD Test Guideline 429)
Remarks: (ECHA)

**Germ cell mutagenicity**
Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster ovary cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473



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Result: negative
Remarks: (ECHA)
Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: without metabolic activation
Method: OECD Test Guideline 471
Result: negative
Remarks: (ECHA)

Test Type: Micronucleus test
Species: Mouse

Application Route: Intraperitoneal
Method: OECD Test Guideline 474
Result: negative
Remarks: (ECHA)

**Carcinogenicity**
Suspected of causing cancer.

| | |
|---|---|
| IARC: | 2A - Group 2A: Probably carcinogenic to humans (Tetrachlorethylene) |
| NTP: | RAHC - Reasonably anticipated to be a human carcinogen (Tetrachlorethylene) |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. |

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure**
May cause drowsiness or dizziness.

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

### 11.2 Additional Information

Repeated dose toxicity - Mouse - female - Oral - LOAEL (Lowest observed adverse effect level) - 390 mg/kg

RTECS: KX3850000
narcosis, Liver injury may occur., Kidney injury may occur.

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 5 mg/l - 96 h<br>Remarks: (ECHA) |



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| | |
|---|---|
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 7.50 mg/l - 48 h |
| Toxicity to algae | ErC50 - Chlamydomonas reinhardtii (green algae) - 3.64 mg/l - 72 h<br>Remarks: (ECHA) |
| Toxicity to fish(Chronic toxicity) | flow-through test NOEC - Jordanella floridae - 1.99 mg/l - 10 d<br>Remarks: (ECHA) |
| Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) | semi-static test NOEC - Daphnia magna (Water flea) - 0.51 mg/l - 28 d<br>Remarks: (ECHA) |

**12.2 Persistence and degradability**

| | |
|---|---|
| Biodegradability | aerobic - Exposure time 28 d<br>Result: 11 % - Not readily biodegradable.<br>(OECD Test Guideline 301C) |

**12.3 Bioaccumulative potential**

| | |
|---|---|
| Bioaccumulation | Lepomis macrochirus (Bluegill) - 21 d<br>- 0.00343 mg/l(Tetrachlorethylene)<br><br>Bioconcentration factor (BCF): 49 |

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Endocrine disrupting properties**

No data available

**12.7 Other adverse effects**

No data available

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**

**Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.



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## SECTION 14: Transport information

**DOT (US)**
UN number: 1897 Class: 6.1 Packing group: III
Proper shipping name: Tetrachloroethylene
Reportable Quantity (RQ): 100 lbs
Reportable Quantity (RQ): 100 lbs
Reportable Quantity (RQ): 10 lbs
Reportable Quantity (RQ): 10 lbs
Marine pollutant: yes Poison Inhalation Hazard: No

**IMDG**
UN number: 1897 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: TETRACHLOROETHYLENE
Marine pollutant : yes
Marine pollutant : yes

**IATA**
UN number: 1897 Class: 6.1 Packing group: III
Proper shipping name: Tetrachloroethylene

## SECTION 15: Regulatory information

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| Tetrachlorethylene | 127-18-4 | 100 | 100 |
| Tetrachlorethylene | 127-18-4 | 100 | 100 (D039) |
| Tetrachlorethylene | 127-18-4 | 10 | 10 (F001) |
| Tetrachlorethylene | 127-18-4 | 10 | 10 (F002) |

**SARA 304 Extremely Hazardous Substances Reportable Quantity**
This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**
This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Acute Health Hazard
Chronic Health Hazard

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

Tetrachlorethylene 127-18-4 >= 90 - <= 100 %

**US State Regulations**

**Massachusetts Right To Know**
Tetrachlorethylene 127-18-4



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**Pennsylvania Right To Know**

Tetrachlorethylene 127-18-4

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

Tetrachlorethylene 127-18-4

**Washington Chemicals of High Concern**

Tetrachlorethylene 127-18-4

**California Prop. 65**

WARNING: This product can expose you to chemicals including Tetrachlorethylene, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

**The ingredients of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16: Other information

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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Version: 8.10 Revision Date: 09/06/2024 Print Date: 09/07/2024



The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

# Safety Data Sheets (SDS)

## SECTION 1-IDENTIFICATION

**Product name:** Toluene

**Other names:-**

**Proper shipping name:** Toluene

**Recommended use of the chemical and restrictions on use:**
The major use of toluene is as a mixture added to gasoline to improve octane ratings. Used as a solvent for paint, resins, lacquers inks & adhesives. Component of solvent blends and thinners. Used in the manufacture of chemicals, dyes, explosives, benzoic acid. Some grades of toluene may contain traces of xylene and benzene.
The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.
WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.

**Manufacturer/Supplier Name:** Taiwan SM Corp., Kaohsiung plant
**Address:** NO.7, Industrial 1st Rd, Lin-Yuan Kaohsiung County 83203, Taiwan, R.O.C.
**Phone No.:** 886-7-6414511

**Emergency phone No./Fax No.:** 886-7-6414511 Ext. 221 (on duty), 886-7-6414517 (off duty)/886-7-6423828

## SECTION 2-HAZARDS IDENTIFICATION

**GHS Classification:**

Flammable Liquid Category 2
Acute Toxicity (Oral) Category 4
Skin Corrosion/ Irritation Category 2
Serious Eye Damage/ Eye Irritation Category 2
Specific Target Organ Toxicity Repeated Exposure Category 2
Hazardous To The Aquatic Environment (Acute) Category 3
Aspiration Hazard Category 1

**GHS Label elements:**

**Hazard symbols**



**Signal word**

Danger

**Hazard statements**

Highly flammable liquid and vapor
Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
May cause damage to organs through prolonged or repeated exposure.
May cause long lasting harmful effects to aquatic life.
May be fatal if swallowed and enters airways.

**Precautionary statements**

Use only in well ventilated area.
Control of exposure by mechanical ventilation in an unventilated or confined space.
Avoid breathing vapors and contact with skin and eyes.
Wear breathing apparatus/protective gloves/face protection.
Store in well-ventilated place.
Disposal must be in accordance with applicable federal, state, or local regulations.

**Other hazards:** —

## SECTION 3-COMPOSITION/INFORMATION ON INGREDIENTS

| CAS No. | Chemical Name | wt% by weight | EINECS No. |
|---|---|---|---|
| 00108-88-3 | Toluene | 97.0 min. | 203-625-9 |
| Synonyms | **Methylbenzol; Methylbenzene; Toluol; Phenylmethane** | | |

## SECTION 4-FIRST AID MEASURES

**Description of necessary first aid measures**

Eye:

1. Flush immediately with warm water for at least 20 minutes.
2. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
3. If pain persists or recurs seek medical attention.
4. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin:

1. Removing contaminated clothing, shoes, and leathery wearings, cleaning procedure is available before reused or waste treatment.
2. Washing affected area thoroughly with soap and water for at least 20 minutes.
3. Call a Physician if irritation develops or persists.

Ingestion:

1. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomits.
2. If victim is conscious and alert, give 2～4 cupfuls of milk/water to dilute the substance in stomach.
3. Never give anything by mouth to an unconscious person.
4. Don't induce vomiting unless directed to do so by medical person.
5. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
6. Then seek for medical attention.

Inhalation:

1. Remove from further exposure and flush thoroughly with air.
2. Lay patient down. Keep warm and rested.
3. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
4. If respiratory irritation, seek immediate medical assistance and call a physician.

**Most important symptoms/effects, acute and delayed**

Headache, fatigue, drowsiness, insomnia, anorexia and pain in limbs, nervousness, impairment of memory.

**Indication of immediate medical attention and special treatment needed, if necessary**

For acute or short term repeated exposures to toluene:

Inhalation:

1. Inhalation overexposure can produce toxic effects. Monitor for respiratory distress.
2. If cough or difficulty in breathing develops, evaluate for upper respiratory tract inflammation, bronchitis, and pneumonitis. Administer supplemental oxygen with assisted ventilation, as required.
3. This material (or a component) sensitizes the heart to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material.
4. Administration of sympathomimetic drugs should be avoided.

Ingestion:

1. If ingested, this material presents a significant aspiration and chemical pneumonitis hazard.
2. Induction of emesis is not recommended.
3. Consider activated charcoal and/or gastric lavage.
4. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

## SECTION 5-FIRE FIGHTING MEASURES

**Extinguishing media**

Foam、$CO_2$、Dry chemical、Water fog.

**Specific hazards arising from the chemical**

1. Liquid and vapor are highly flammable.
2. Severe fire hazard when exposed to heat, flame and/or oxidizers.
3. Vapor may travel a considerable distance to source of ignition.
4. Heating may cause expansion or decomposition leading to violent rupture of containers.
5. On combustion, may emit toxic fumes of carbon monoxide (CO).

**Special protective equipment and precautions for fire-fighters**

1. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.
2. Evacuate area and fight the fire from a maximum distance or use unmanned hose holders or monitor nozzles.
3. Cover pooling liquid with foam.
4. Containers can build pressure if exposed to radiant heat; cool adjacent containers with flooding quantities of water until well after the fire is out.
5. Withdraw immediately from the area if there is a rising sound from a venting safety device or discoloration of vessels, tanks, or pipelines.
6. Be aware that burning liquid will float on water.
7. Notify appropriate authorities of potential fire and explosion hazard if liquid enter sewers or waterways

## SECTION 6-ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedure**

1. Personal protective equipment (specified in Section 8)
   Eyes : Chemical safety goggles are recommended, and a face shield is added when needed.
   Skin : Wear appropriate protective gloves to avoid skin contact.
   Clothing: When direct contact is likely, use rubberized clothings, apron and boots.
   Respiratory : When limits are exceeded, wear a respirator approved by NIOSH/MSHA for protection against organic dust, mists and vapors.
2. Remove all sources of ignition. No smoking, naked lights or ignition sources. Ventilate area of leak or spill.
3. Keep unnecessary and unprotected personnel from entering. Evacuate personnel from the danger area. Consult with an expert about the emergency procedures.

**Environmental precautions**

1. Prevent spillage from entering drains, surface, and groundwater.
2. Contain and recover liquid when possible. Use non-sparking tools and equipment.
3. Collect liquid in an appropriate container or absorb with an inert material (e.g. vermiculite, dry sand, earth), and place in a chemical waste container.
4. Report the accidental spill/release to Local/State government.

**Methods and materials for containment and cleaning up**

Minor spill:

1. Remove all ignition sources.
2. Clean up all spills immediately.
3. Avoid breathing vapors and contact with skin and eyes.
4. Control personal contact by using protective equipment.
5. Contain and absorb small quantities with vermiculite or other absorbent material.
6. Wipe up.
7. Collect residues in a flammable waste container.

Major spill

1. Clear area of personnel and move upwind.
2. Alert emergency responders and tell them location and nature of hazard.
3. May be violently or explosively reactive.
4. Wear breathing apparatus plus protective gloves.
5. Prevent spillage from entering drains or water course.
6. No smoking, naked lights or ignition sources. Increase ventilation.
7. Stop leak if safe to do so.
8. Water spray or fog may be used to disperse/absorb vapor.
9. Contain spill with sand, earth or vermiculite.
10. Use only spark-free shovels and explosion proof equipment.
11. Collect recoverable product into labeled containers for recycling..
12. Absorb remaining product with sand, earth or vermiculite.
13. Collect solid residues and seal in labeled drums for disposal.
14. Wash area and prevent runoff into drains.
15. If contamination of drains or waterways occurs, advise emergency services.

## SECTION 7-HANDLING AND STORAGE

**Precautions for safe handling**

1. Wash thoroughly after handling.
2. Use only in well ventilated area.
3. Ground and bond containers when transferring.
4. Use spark-free tools and explosion proof equipment.
5. Empty containers retain product residue (liquid/vapor), and can be dangerous.
6. Do not pressurize, cut, weld, braze, solder, drill, or expose empty containers to heat, sparks or open flames.

**Conditions for safe storage, including any incompatibilities**

1. Store in original containers in approved flame-proof area.
2. No smoking, naked lights, heat or ignition sources.
3. DO NOT store in pits, depressions, basements or areas where vapors may be trapped.
4. Keep containers securely sealed.
5. Store away from incompatible materials in a cool, dry well ventilated area.
6. Protect containers against physical damage and check regularly for leaks.
7. Keep containers tightly closed and store in a cool, dry, well-ventilated place, plainly labeled, and out of closed vehicles.
8. Ground all equipment containing this material.
9. Observe manufacturer's storing and handling recommendations.
10. Containers should be able to withstand pressures expected from warming and cooling in storage. This flammable liquid should be stored in a separate safety cabinet or room. A refrigerated room is preferable for materials with a flash point temperature lower than 70°F (21°C).

## SECTION 8-EXPOSURE CONTROLS, PERSONAL PROTECTION

OSHA - Final PELs : 200 ppm TWA.
OSHA Ceiling : 300ppm.
ACGIH : 50 ppm, skin -potential forcutaneous absorption.
NIOSH : 100 ppm TWA; 375 mg/$m^3$ TWA; 500 ppm IDLH.
Taiwan TWA : 100 ppm (skin).
Taiwan STEL : 125 ppm (skin).
Taiwan Ceiling : -------.
Taiwan BEI : 1 mg/l (before on duty).

**Engineering control**

1. Process should be located at least 17 meter (50 feet) away from open flames and all high temperature operations likely to cause ignition of the styrene monomer vapor.
2. In venting styrene monomer vapors, consideration should be given to possible halogenation of the vapors by low concentrations of free chlorine and bromine with the resultant formation of lacrimations.
3. Process should be designed so that the operator is not exposed to direct contact with Toluene or the vapor. The technical problems of designing equipment, providing adequate ventilation and operating procedures which promise maximum security and economy, can best be handled by competent engineers.
4. It is essential for safety that equipment be used and maintained as recommended by the manufacturer.
5. Tanks used to store or process Toluene should be closed vessels vented to a safe point of discharge in the outside atmosphere away from operating stations, roadways, and at least 17 meter (50 feet) from possible sources of ignitions. All sparks, flames, heated surface, or other sources of ignition should be kept away from all vents. It is advisable, to provide suction on vessels when inspection or observation openings are made, to minimize or eliminate escape of vapors.

**Personal protective equipment**

Eye Protection:
Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Chemical goggles should be worn during transfer operations or when there is a likelihood of misting, splashing, or spraying of this material. A suitable emergency eye wash water and safety shower should be located near the work station.

Skin protection:
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Clothing:
Avoid skin contact. Wear long-sleeved fire-retardant garments (e.g., Nomex®) while working with flammable and combustible liquids. Additional chemical-resistant protective gear may be required if splashing or spraying conditions exist. This may include an apron, boots and additional facial protection. If product comes in contact with clothing, immediately remove soaked clothing and shower. Promptly remove and discard contaminated leather goods.

Respirators:
For known vapor concentrations above the occupational exposure guidelines (see below), use a NIOSH-approved organic vapor respirator if adequate protection is provided. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134). For airborne vapor concentrations that exceed the recommended protection factors for organic vapor respirators, use a full-face, positive-pressure, supplied air respirator. Due to fire and explosion hazards, do not enter atmospheres containing concentrations greater than 10% of the lower flammable limit of this product.

## SECTION 9-PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| Appearance : Transparent liquid | Upper/lower explosive limits : 1.2%～7.1% |
| Odour : pleasant aromatic petroleum odour | Vapor Pressure : 22 mmHg @20℃/68℉ |
| Odour threshold : 0.16～37 ppm (detect)<br>1.9～69 ppm (recognition) | Vapor Density : 3.1 (air=1) |
| PH : Not available | Relative density : 0.86 (water=1) |
| Melting/Freezing Point : －95 ℃ | Solubility in water : 54～58 mg/100 ml |
| Initial boiling point/boiling range : 110.6 ℃ | Partition coefficient : 2.73 (n-octanol/water) |
| Flash point : 4.4 ℃ (closed cup) | Auto-ignition temperature : 480℃ |
| Evaporation Rate : 2.24 (BuAc=1) | Decomposition temperature : Not available |
| Flammability (solid/gas) : Not available | Viscosity : 0.6 mPa.s max @20℃ |
| Molecular Formula : $C_6H_5CH_3$ | Molecular Weight : 92.056 |

## SECTION 10-STABILITY AND REACTIVITY

**Reactivity**
Vapor is explosive when exposed to heat or flame

**Chemical stability**
Stable at room temperature in closed containers under normal storage and handling conditions.

**Possibility of hazardous reaction**
Has not been reported.

**Condition to avoid**
Product is highly flammable – Keep away from sources of ignition. Avoid the higher temperatures. Keep away from open fire, heating elements and heat radiating surface and prevent from forming of the vapours mixtures with air in explosion limits.

**Incompatible materials**
Heat, flame, strong oxidizers, nitric and sulfuric acids, chlorine, nitrogen tetraoxide; will attack some forms of plastics, rubber, coatings.

**Hazardous decomposition products**
Carbon monoxide, carbon dioxide, hydrocarbons.

## SECTION 11-TOXICOLOGICAL INFORMATION

Routes of exposure
Eye, Skin, inhalation, Ingestion.

Symptoms (treatments as indicated in Section 4)
Eye: The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated. There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. There may be damage to the cornea. Unless treatment is prompt and adequate there may be permanent loss of vision. Conjunctivitis can occur following repeated exposure.

Skin: Contact with the material may damage the health of the individual; systemic effects may result following absorption. The material may cause moderate inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterized by redness, swelling and blistering. Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

Ingestion: Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual. Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733). Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce gastrointestinal discomfort and may be harmful if swallowed. Ingestion may result in nausea, pain and vomiting. Vomit entering the lungs by aspiration may cause potentially lethal chemical pneumonitis.

Inhalation: Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination. If exposure to highly concentrated solvent atmosphere is prolonged this may lead to narcosis, unconsciousness, even coma and possible death. The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.

Chronic exposure: There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Toxicity
LD50: <870 mg/kg (rat, oral)
LC50: 6000 ppm/6h (rat, inhalation)

Chronic effect
Carcinogenicity:
ACGIH : A4-Not classifiable as a Human Carcinogen.
OSHA : Possible select carcinogen.
IARC : Group 3 carcinogen.

Epide miology: Not available.

Teratogenicity: Teratogenic effects have occurred in experimental animals.

Reproductive Effects: Adverse reproductive effects have occurred in experimental animals.

Neurotoxicity: Not available.

Mutagenicity: Not available.

## SECTION 12-ECOLOGICAL INFORMATION

**Ecotoxicity**
$LC_{50}$ (96 hr.) Fish: 7.3～22.8 mg/l
$EC_{50}$ (48 hr.) Water flea: —
Biocencentration factor (BCF): 1.67～380

**Persistence and degradability**
1. The material are expected to form a slick on the surface of waters after release in calm sea conditions. This is expected to evaporate and enter the atmosphere where it will be degraded through reaction with hydroxyl radicals.
2. Some of the material will become associated with benthic sediments, and it is likely to be spread over a fairly wide area of sea floor. Marine sediments may be either aerobic or anaerobic. The material, in probability, is biodegradable, under aerobic conditions. Evidence also suggests that the hydrocarbons may be degradable under anaerobic conditions although such degradation in benthic sediments may be a relatively slow process.
3. Under aerobic conditions the material will degrade to water and carbon dioxide, while under aerobic processes it will produce water, methane, carbon dioxide and carbon dioxide.
4. Based on test results, as well as theoretical considerations, the potential for bioaccumulation may be high. Toxic effects are often observed in species such as blue mussel, daphnia, freshwater green algae, marine copepods and amphipods.

Half-life (Air): 10～104 hr
Half-life (Surface water): 96～528 hr
Half-life (Ground water): 168～672 hr
Half-life (Soil): 96～528 hr

**Bioaccumulative potential**
This material is not expected to significantly bioaccumulate.

**Mobility in soil:** —

**Other adverse effects:** —

## SECTION 13-DISPOSAL CONSIDERATIONS

Residues and spilled material are hazardous waste due to ignitability. Disposal must be in accordance with applicable federal, state, or local regulations.
The container for this product can present explosion or fire hazards, even when emptied. To avoid risk of injury, do not cut, puncture, or weld on or near this container. Since the emptied containers retain product residue, follow label warnings even after container is emptied.

## SECTION 14-TRANSPORTATION INFORMATION

| | | | | |
|---|---|---|---|---|
| US DOT | Shipping Name | Toluene | Hazard Labels |   |
| | Hazard Class | 3 | | |
| | UN Number | 1294 | | |
| | Packing Group | II | | |
| Sea(IMO/IMDG) | Shipping Name | Toluene | Hazard Labels |  |
| | Hazard Class | 3.2 | | |
| | UN Number | 1294 | | |
| | Packing Group | II | | |
| | IMDG Code Page | 3285 | | |
| | MARPOL | Not a DOT "Marine Pollutant" per 49 CFR 171.8. | | |
| Air(ICAO/IATA) | Shipping Name | Toluene | Hazard Labels |  |
| | Hazard Class | 3.2 | | |
| | Subsidiary Class | 1294 | | |
| | Packing Group | II | | |
| RID/ ADR | No information available. | | | |
| Canadian TDG | Shipping Name | Toluene | Hazard Labels |   |
| | Hazard Class | 3 | | |
| | UN Number | 1294 | | |
| | Packing Group | II | | |
| | Subsidiary Class | 9.2 | | |

## SECTION 15-REGULATORY INFORMATION

US FEDERAL

TSCA

CAS# 108-88-3 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 108-88-3: Effective Date: 10/4/82; Sunset Date: 10/4/92

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

CAS# 108-88-3 : final RQ = 1000 pounds (454 kg)

Section 302 (TPQ)

None of the chemicals in this material have a TPQ.

SARA Codes

CAS# 108-88-3 : acute, flammable.

Section 313

This material contains Toluene (CAS# 108-88-3, 99% & 100%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 372.

Clean Air Act

CAS# 108-88-3 is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act

CAS# 108-88-3 is listed as a Hazardous Substance under the CWA.
CAS# 108-88-3 is listed as a Priority Pollutant under the Clean Water Act.
CAS# 108-88-3 is listed as a Toxic Pollutant under the Clean Water Act.

OSHA

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

Toluene can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

WARNING: This product contains Toluene, a chemical known to the state of California to cause birth defects or other reproductive harm.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN F
Risk Phrases : R 10 Flammable.
R 20 Harmful by inhalation.
Safety Phrases : S 9 Keep container in a well-ventilated place.
S 16 Keep away from sources of ignition - No smoking.
S 25 Avoid contact with eyes.
S 29 Do not empty into drains.
S 33 Take precautionary measures against static discharges.

WGK (Water Danger/Protection)

CAS# 108-88-3: 2

United Kingdom Occupational Exposure Limits

CAS# 108-88-3: OES-United Kingdom, TWA 50 ppm TWA; 191 mg/m3 TWA.
CAS# 108-88-3: OES-United Kingdom, STEL 150 ppm STEL; 574 mg/m3 STEL.

CANADA

CAS#100-42-5 is listed on Canada's DSL/NDSL list.
This product has a WHMIS classification of B2, D2A (99%)/B3, D2A (100%).
CAS# 105-05-5 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

- CAS# 108-88-3: OEL-AUSTRALIA:TWA 100 ppm (375 mg/m3);STEL 150 ppm (560 mg/m3)
- OEL-BELGIUM:TWA 100 ppm (377 mg/m3);STEL 150 ppm (565 mg/m3)
- OEL-CZECHOSLOVAKIA:TWA 200 mg/m3;STEL 1000 mg/m3
- OEL-DENMARK:TWA 50 ppm (190 mg/m3);Skin
- OEL-FINLAND:TWA 100 ppm (375 mg/m3);STEL 150 ppm; Skin
- OEL-FRANCE:TWA 100 ppm (375 mg/m3);STEL 150 ppm (560 mg/m3)
- OEL-GERMANY:TWA 100 ppm (380 mg/m3)
- OEL-HUNGARY:TWA 100 mg/m3;STEL 300 mg/m3;Skin
- OEL-JAPAN:TWA 100 ppm (380 mg/m3)
- OEL-THE NETHERLANDS:TWA 100 ppm (375 mg/m3);Skin
- OEL-THE PHILIPPINES:TWA 100 ppm (375 mg/m3)
- OEL-POLAND:TWA 100 mg/m3
- OEL-RUSSIA:TWA 100 ppm; STEL 50 mg/m3
- OEL-SWEDEN:TWA 50 ppm (200 mg/m3);STEL 100 ppm (400 mg/m3);Skin
- OEL-SWITZERLAND:TWA 100 ppm (380 mg/m3);STEL 500 ppm
- OEL-THAILAND:TWA 200 ppm; STEL 300 ppm
- OEL-TURKEY:TWA 200 ppm (750 mg/m3)
- OEL-UNITED KINGDOM:TWA 100 ppm (375 mg/m3);STEL 150 ppm; Skin OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

## SECTION 16-OTHER INFORMATION

**References and sources**

1. CHEMINFO Data Bank, CCINFO CD, 2005-3
2. HAZARD TEXT Data Bank, TOMES PLUS CD, Vol.65, 2005
3. RETECS Data Bank, TOMES CPS CD, Vol.65, 2005
4. HSDB Data Bank, TOMES CPS CD, Vol.65, 2005
5. Hazardous Substance Data Bank, Environment Protection, Administration, Executive Yuan, ROC (Taiwan)
6. Chemwatch Data Bank, 2005-1
7. SDS, GHS in Taiwan, Council of Labor Affairs, Executive Yuan, ROC (Taiwan)

| Version | Date | Remark |
|---|---|---|
| Version 1 | 06/01/1998 | Original Version. |
| Version 2 | 04/20/2001 | Updated 10 sections to 16 sections. |
| Version 3 | 08/01/2003 | Updated “SECTION 9-PHYSICAL AND CHEMICAL PROPERTIES”. |
| Version 4 | 01/01/2006 | Updated “SECTION 14-TRANSPORTATION INFORMATION”. |
| Version 5 | 08/05/2008 | Updated each section by GHS SDS. |
| Prepared by | Safety & Environment Protection Section, Taiwan SM Corporation Kaohsiung Plant. | |

# SAFETY DATA SHEET

Version 6.8
Revision Date 09/07/2024
Print Date 09/08/2024

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : PCB No 28

Product Number : 35601
Brand : Sigma-Aldrich
Index-No. : 602-039-00-4
CAS-No. : 7012-37-5

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

### 1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Specific target organ toxicity - repeated exposure (Category 2), H373
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410



The life science business of Merck KGaA, Darmstadt, Germany
operates as MilliporeSigma in the US and Canada

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word Warning

Hazard Statements

| | |
|---|---|
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary Statements

| | |
|---|---|
| P260 | Do not breathe dust. |
| P273 | Avoid release to the environment. |
| P314 | Get medical advice/ attention if you feel unwell. |
| P391 | Collect spillage. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms : 2,4,4'-Trichlorobiphenyl
2,4,4'-PCB

Formula : $C_{12}H_7Cl_3$
Molecular weight : 257.54 g/mol
CAS-No. : 7012-37-5
EC-No. : 230-293-2
Index-No. : 602-039-00-4

| Component | Classification | Concentration |
|---|---|---|
| **2,4,4'-Trichlorobiphenyl** | | |
| | STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H373, H400, H410<br>Concentration limits:<br>>= 0.005 %: STOT RE 2, H373; >= 0.005 %: STOT RE 2, H373;<br>M-Factor - Aquatic Acute: 10 - Aquatic Chronic: 10 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.



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## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

**General advice**
Show this material safety data sheet to the doctor in attendance.

**If inhaled**
After inhalation: fresh air. Call in physician.

**In case of skin contact**
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

**In case of eye contact**
After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

**If swallowed**
After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Water Foam Carbon dioxide (CO2) Dry powder

**Unsuitable extinguishing media**
For this substance/mixture no limitations of extinguishing agents are given.

### 5.2 Special hazards arising from the substance or mixture
Carbon oxides
Hydrogen chloride gas
Combustible.
Development of hazardous combustion gases or vapours possible in the event of fire.

### 5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information
Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.



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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

### 6.2 Environmental precautions

Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

**Advice on safe handling**
Work under hood. Do not inhale substance/mixture.

**Hygiene measures**
Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage conditions**
Tightly closed. Dry.

**Storage class**
Storage class (TRGS 510): 11: Combustible Solids

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Ingredients with workplace control parameters**



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| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| 2,4,4'-Trichlorobiphenyl | 7012-37-5 | TWA | 0.001 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | Remarks | Potential Occupational Carcinogen | | |

## 8.2 Exposure controls

**Appropriate engineering controls**
Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance.

**Personal protective equipment**

**Eye/face protection**
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

**Skin protection**
Handle with impervious gloves.

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:KCL 741 Dermatril® L

**Body Protection**
protective clothing

**Respiratory protection**
Recommended Filter type: Filter type P2
The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.
These measures have to be properly documented.
required when dusts are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.



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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odor | No data available |
| c) | Odor Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/ range: 56 °C (133 °F) |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | > 100.00 °C (> 212.00 °F) |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapor pressure | No data available |
| l) | Vapor density | No data available |
| m) | Density | No data available |
| | Relative density | No data available |
| n) | Water solubility | insoluble |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Autoignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | none |

### 9.2 Other safety information

No data available



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## SECTION 10: Stability and reactivity

**10.1 Reactivity**
The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

**10.2 Chemical stability**
The product is chemically stable under standard ambient conditions (room temperature) .

**10.3 Possibility of hazardous reactions**
Violent reactions possible with:
strong oxidising agents

**10.4 Conditions to avoid**
no information available

**10.5 Incompatible materials**
No data available

**10.6 Hazardous decomposition products**
In the event of fire: see section 5

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Acute toxicity**
Oral: No data available
Inhalation: No data available
Dermal: No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: 1 - Group 1: Carcinogenic to humans (2,4,4'-Trichlorobiphenyl)

NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**Reproductive toxicity**
No data available



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**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**
No data available

### 11.2 Additional Information

RTECS: DV8840000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Pimephales promelas (fathead minnow) - > 0.16 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - > 0.16 mg/l - 48 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Endocrine disrupting properties
No data available

### 12.7 Other adverse effects
No data available



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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**
Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## SECTION 14: Transport information

**DOT (US)**
UN number: 3432 Class: 9 Packing group: II
Proper shipping name: Polychlorinated biphenyls, solid
Reportable Quantity (RQ):
Marine pollutant: yes Poison Inhalation Hazard: No

**IMDG**
UN number: 3432 Class: 9 Packing group: II EMS-No: F-A, S-A
Proper shipping name: POLYCHLORINATED BIPHENYLS, SOLID
Marine pollutant : yes
Marine pollutant : yes

**IATA**
UN number: 3432 Class: 9 Packing group: II
Proper shipping name: Polychlorinated biphenyls, solid

## SECTION 15: Regulatory information

**CERCLA Reportable Quantity**
This material does not contain any components with a CERCLA RQ.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**
This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**
This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US State Regulations**

**Massachusetts Right To Know**
No components are subject to the Massachusetts Right to Know Act.



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**Pennsylvania Right To Know**

2,4,4'-Trichlorobiphenyl 7012-37-5

**Maine Chemicals of High Concern**

Product does not contain any listed chemicals

**Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

**Washington Chemicals of High Concern**

Product does not contain any listed chemicals

**California Prop. 65**

WARNING: This product can expose you to chemicals including 2,4,4'-Trichlorobiphenyl, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

**The ingredients of this product are reported in the following inventories:**

TSCA : Product contains substance(s) not listed on TSCA inventory.

**TSCA list**

No substances are subject to a Significant New Use Rule.

The following substance(s) is/are subject to TSCA 12(b) export notification requirements:
2,4,4'-Trichlorobiphenyl 7012-37-5

## SECTION 16: Other information

**Further information**

The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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# SAFETY DATA SHEET
# Xylene

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

Date issued 11.11.2013

### 1.1. Product identifier

| | |
|---|---|
| Product name | Xylene |
| Chemical name | Xylene |
| Synonyms | Xylol, dimethyl benzene, xylenol |
| REACH Reg No. | 01-2119488216-32-0000 |
| CAS no. | 1330-20-7 |
| EC no. | 215-535-7 |
| Index no. | 601-022-00-9 |
| Article no. | 13000000 |

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation For the preparation of paints and as a solvent. General purpose cleaner.

### 1.3. Details of the supplier of the safety data sheet

### Manufacturer

| | |
|---|---|
| Company name | Fred Holmberg & Co AB |
| Office address | Geijersgatan 8 |
| Postal address | Box 60056 |
| Postcode | S-216 10 |
| City | Limhamn |
| Country | Sweden |
| Tel | +46 (0)40 15 79 20 |
| Fax | +46 (0)40 16 22 95 |
| E-mail | info@holmberg.se |
| Website | http://www.holmberg.se/en/ |

### 1.4. Emergency telephone number

Emergency telephone 112 (Europe)

## SECTION 2: Hazards identification

### 2.1. Classification of substance or mixture

| | |
|---|---|
| Classification according to 67/548/EEC or 1999/45/EC | Xi; R38<br>Xn; R20/21<br>R10 |
| Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] | Flam. Liq. 3; H226;<br>Acute tox. 4; H312;<br>Skin Irrit. 2; H315;<br>Acute tox. 4; H332; |

### 2.2. Label elements

**Hazard Pictograms (CLP)**



| | |
|---|---|
| Signal word | Danger |
| Hazard statements | H226 Flammable liquid and vapour.<br>H312 Harmful in contact with skin.<br>H315 Causes skin irritation.<br>H332 Harmful if inhaled. |
| Precautionary statements | P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.<br>P233 Keep container tightly closed.<br>P243 Take precautionary measures against static discharge.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection.<br>P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.<br>P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.<br>P331 Do NOT induce vomiting.<br>P403 + P235 Store in a well-ventilated place. Keep cool. |

### 2.3. Other hazards

| | |
|---|---|
| Other hazards | Not known. |

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

| Substance | Identification | Classification | Contents |
|---|---|---|---|
| Xylene | CAS no.: 1330-20-7<br>EC no.: 215-535-7<br>Index no.: 601-022-00-9 | R10<br>Xn; R20/21<br>Xi; R38<br>Flam. Liq. 3; H226<br>Acute tox. 4; H332<br>Acute tox. 4; H312<br>Skin Irrit. 2; H315<br>Note : C | 75 - 90 % |
| Ethylbenzene | CAS no.: 100-41-4<br>EC no.: 202-849-4<br>Index no.: 601-023-00-4<br>Synonyms: Ethylbenzene | F; R11<br>Xn; R20<br>Flam. Liq. 2; H225<br>Acute tox. 4; H332 | 10 - 25 % |

| | |
|---|---|
| Column headings | CAS no. = Chemical Abstracts Service; EU (Einecs or Elincs number) = European inventory of Existing Commercial Chemical Substances; Ingredient name = Name as specified in the substance list (substances that are not included in the substance list must be translated, if possible). Contents given in; %, %wt/wt, %vol/wt, %vol/vol, mg/m3, ppb, ppm, weight%, vol% |
| HH/HF/HE | T+ = Very toxic, T = Toxic, C = Corrosive, Xn = Harmful, Xi = Irritating, E = Explosive, O = Oxidizing, F+ = Extremly flammable, F = Very flammable, N = Environmental hazard |

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

| | |
|---|---|
| Inhalation | Move the exposed person to fresh air at once. Get medical attention if any discomfort continues. |
| Skin contact | Remove contaminated clothes and rinse skin thoroughly with water. |
| Eye contact | Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention if any discomfort continues. |
| Ingestion | NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Do not induce vomiting. Rinse mouth with water. Get medical attention. |

### 4.2. Most important symptoms and effects, both acute and delayed

| | |
|---|---|
| Information for health personnel | Treat Symptomatically. Do not give victim anything to drink if he is |

unconscious.

### 4.3. Indication of any immediate medical attention and special treatment needed

| | |
|---|---|
| Specific details on antidotes | No recommendation given. |

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

| | |
|---|---|
| Suitable extinguishing media | Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. |

### 5.2. Special hazards arising from the substance or mixture

| | |
|---|---|
| Fire and explosion hazards | Solvent vapours may form explosive mixtures with air. |
| Hazardous combustion products | Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2). |

### 5.3. Advice for firefighters

| | |
|---|---|
| Fire fighting procedures | No specific fire fighting procedure given. |

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

| | |
|---|---|
| Personal protection measures | Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. Ventilate well. Stop leak if possible without risk. Avoid contact with skin and eyes. Do not breathe vapour. |

### 6.2. Environmental precautions

| | |
|---|---|
| Environmental precautionary measures | Avoid discharge into drains, water courses or onto the ground. |

### 6.3. Methods and material for containment and cleaning up

| | |
|---|---|
| Cleaning method | Dam and absorb spillages with sand, earth or other non-combustible material. |

### 6.4. Reference to other sections

| | |
|---|---|
| Other instructions | No recommendation given. |

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

| | |
|---|---|
| Handling | Keep away from heat, sparks and open flame. Take precautionary measures against static discharges. Mechanical ventilation may be required. |

### Protective Safety Measures

| | |
|---|---|
| Advice on general occupational hygiene | Provide easy access to water supply and eye wash facilities. |

### 7.2. Conditions for safe storage, including any incompatibilities

| | |
|---|---|
| Storage | Keep away from heat, sparks and open flame. Ground container and transfer equipment to eliminate static electric sparks. Store in a cool and well-ventilated place. |

### 7.3. Specific end use(s)

| | |
|---|---|
| Specific use(s) | Not entered. |

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### DNEL / PNEC

| Method of testing | Contents |
|---|---|
| DNEL | Group: Industrial<br>Exposure route: Inhalation<br>Exposure frequency: Short term (acute)<br>Critical Component: Etylbenzen<br>Value: 289 mg/kg/dag |

| | |
|---|---|
| DNEL | Group: Industrial<br>Exposure route: Inhalation<br>Exposure frequency: Long term (repeated)<br>Critical Component: Etylbenzen<br>Type of effect: Systemic effect<br>Value: 77 mg/kg/dag |
| DNEL | Group: Industrial<br>Exposure route: Dermal<br>Exposure frequency: Long term (repeated)<br>Critical Component: Etylbenzen<br>Type of effect: Systemic effect<br>Value: 180 mg/kg/dag |
| DNEL | Group: Consumer<br>Exposure route: Inhalation<br>Exposure frequency: Long term (repeated)<br>Critical Component: Etylbenzen<br>Type of effect: Systemic effect<br>Value: 14,8 mg/kg/dag |
| DNEL | Group: Consumer<br>Exposure route: Dermal<br>Exposure frequency: Long term (repeated)<br>Critical Component: Etylbenzen<br>Type of effect: Systemic effect<br>Value: 108 mg/kg/dag |
| DNEL | Group: Consumer<br>Exposure route: Oral<br>Exposure frequency: Long term (repeated)<br>Critical Component: Etylbenzen<br>Type of effect: Systemic effect<br>Value: 1,6 mg/kg/dag |
| DNEL | Group: Industrial<br>Exposure route: Inhalation<br>Exposure frequency: Short term (acute)<br>Critical Component: xylen<br>Value: 442 mg/kg/dag |
| DNEL | Group: Industrial<br>Exposure route: Inhalation<br>Exposure frequency: Long term (repeated)<br>Critical Component: xylen<br>Type of effect: Systemic effect<br>Value: 221 mg/kg/dag |
| DNEL | Group: Industrial<br>Exposure route: Dermal<br>Exposure frequency: Long term (repeated)<br>Critical Component: xylen<br>Type of effect: Systemic effect<br>Value: 3182 mg/kg/dag |
| DNEL | Group: Consumer<br>Exposure route: Inhalation<br>Exposure frequency: Short term (acute)<br>Critical Component: xylen<br>Value: 260 mg/kg/dag |
| DNEL | Group: Consumer<br>Exposure route: Inhalation<br>Exposure frequency: Long term (repeated)<br>Critical Component: xylen<br>Type of effect: Systemic effect |

| | |
|---|---|
| | Value: 65,3 mg/kg/dag |
| DNEL | Group: Consumer<br>Exposure route: Dermal<br>Exposure frequency: Long term (repeated)<br>Critical Component: xylen<br>Type of effect: Systemic effect<br>Value: 1872 mg/kg/dag |
| DNEL | Group: Consumer<br>Exposure route: Oral<br>Exposure frequency: Long term (repeated)<br>Critical Component: xylen<br>Type of effect: Systemic effect<br>Value: 12,5 mg/kg/dag |
| Exposure guidelines | Country of origin: Sverige<br>Limit value type: NGV 200 mg/m3<br>OEL Short Term Value: 450 mg/m3<br>Source: Nationella hygieniska gränsvärden, AFS 2005:17 |
| Other Information | Ovanstående NGV resp. KTV gäller både xylen och etylbenzen |

### 8.2. Exposure controls

Occupational exposure limits: Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours. Protective gloves and goggles are recommended. Provide eyewash, quick drench.

**Safety signs**



#### Respiratory protection

Respiratory protection: Respiratory protection must be used if air contamination exceeds acceptable level. Use respiratory equipment with gas filter, type A2.

#### Hand protection

Hand protection: Use protective gloves. Chemical resistant gloves required for prolonged or repeated contact. Gloves of nitrile rubber, PVA or Viton are recommended.

#### Eye / face protection

Eye protection: Use safety goggles or face shield in case of splash risk.

#### Skin protection

Skin protection (except hands): Wear appropriate clothing to prevent any possibility of skin contact.

#### Hygiene / Environmental

Specific hygiene measures: Wash hands after contact.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Physical state | Fluid. |
| Colour | Colourless. |
| Odour | Aromatic. |
| Comments, pH (as supplied) | Not relevant. |
| Melting point/melting range | Value: < -48 °C |
| Boiling point / boiling range | Value: 136-145 °C |
| Flash point | Value: 27 °C |
| Evaporation rate | Value: 13,5 |
| Explosion limit | Value: 1-7,1 % |
| Vapour pressure | Value: 1 kPa<br>Test temperature: 20 °C |

| | |
|---|---|
| Vapour density | Value: 3,7 |
| Specific gravity | Value: 0,870 kg/m3<br>Test temperature: 20 °C |
| Solubility description | Soluble in: Organic solvents. Not soluble in water. |
| Partition coefficient: n-octanol/water | Value: 3,15 |
| Spontaneous combustability | Value: > 432-530 °C |
| Viscosity | Value: < 0,90 mPas<br>Method of testing: Kinematisk<br>Test temperature: 25 °C |

### 9.2. Other information

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity: Heating may cause a fire.

### 10.2. Chemical stability

Stability: Stable under the prescribed storage conditions.

### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions: Not known.

### 10.4. Conditions to avoid

Conditions to avoid: Avoid heat, flames and other sources of ignition.

### 10.5. Incompatible materials

Materials to avoid: Avoid contact with oxidising agents (e.g. nitric acid, peroxides and chromates). Strong acids.

### 10.6. Hazardous decomposition products

Hazardous decomposition products: Fire creates: Carbon monoxide (CO). Carbon dioxide ($CO_2$).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

### Toxicological Information:

Other toxicological data: Acute Toxicity (Oral LD50): mg/kg (oral rat) > 2000
Acute Toxicity (Inhalation LC50): mg/l (vapours) (4h) > 20
Acute Toxicity (Dermal LD50): mg/kg Rabbit > 2000

### Toxicological data for substances

### Potential acute effects

| | |
|---|---|
| Inhalation | In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea. Icke klassificerad som aspirationstoxisk (Not classified as asp. tox.) |
| Skin contact | Prolonged or frequent contact may cause redness, itching, eczema and skin cracking. Defats the skin. |
| Eye contact | May irritate and cause redness and pain. |
| Ingestion | Ingestion of large amounts may cause unconsciousness. However, ingestion may cause nausea, headache, dizziness and intoxication. Ingestion may cause irritation of the gastrointestinal tract, vomiting and diarrhoea. May cause irritation to the mouth and throat. |

### Delayed effects / repeated exposure

| | |
|---|---|
| Sensitisation | Not known. |
| Chronic effects | None known. |

### Carcinogenic, Mutagenic or Reprotoxic

| | |
|---|---|
| Carcinogenicity | None. |
| Mutagenicity | Not known. |
| Teratogenic properties | Suspected of damaging the unborn child |

| | |
|---|---|
| Reproductive toxicity | Not known. |

## SECTION 12: Ecological information

### 12.1. Toxicity

| | |
|---|---|
| Acute aquatic, fish | Value: 2 mg/l<br>Method of testing: LC50<br>Fish, species: Roccus saxatilis<br>Duration: 96h |
| Acute aquatic, algae | Value: > 3,2 mg/l<br>Method of testing: IC50<br>Algae, species: Selenastrum Capricornum<br>Duration: 72h |
| Acute aquatic, Daphnia | Value: 8,5 mg/l<br>Method of testing: EC50<br>Daphnia, species: Daphnia magna<br>Duration: 48h |

### 12.2. Persistence and degradability

| | |
|---|---|
| Persistence and degradability description | Lättnedbrytbar av biologiska organismer. |
| Chemical oxygen demand (COD) | Value: 5<br>Method of testing: COD |
| Biological oxygen demand (BOD) | Value: 0,55<br>Method of testing: BOD |

### 12.3. Bioaccumulative potential

| | |
|---|---|
| Bioaccumulative potential | Will not bio-accumulate. |
| Bioconcentration factor (BCF) | Value: 22<br>Method of testing: BCF |

### 12.4. Mobility in soil

| | |
|---|---|
| Mobility | The product is insoluble in water and will spread on the water surface. |

### 12.5. Results of PBT and vPvB assessment

| | |
|---|---|
| PBT assessment results | This substance is not classified as PBT or vPvB. |

### 12.6. Other adverse effects

| | |
|---|---|
| Other adverse effects / Remarks | None known. |

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

| | |
|---|---|
| Specify the appropriate methods of disposal | Confirm disposal procedures with environmental engineer and local regulations. Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point. Liquid components can be disposed of by incineration. |
| Product classified as hazardous waste | Yes |
| Packaging classified as hazardous waste | Yes |

## SECTION 14: Transport information

### 14.1. UN number

| | |
|---|---|
| ADR | 1307 |
| RID | 1307 |
| IMDG | 1307 |
| ICAO/IATA | 1307 |

### 14.2. UN proper shipping name

| | |
|---|---|
| ADR | XYLENES |

| | |
|---|---|
| RID | XYLENES |
| IMDG | XYLENES |
| ICAO/IATA | XYLENES |

### 14.3. Transport hazard class(es)

| | |
|---|---|
| ADR | 3 |
| Hazard no. | 30 |
| RID | 3 |
| ADN | 33 |
| IMDG | 3 |
| ICAO/IATA | 3 |

### 14.4. Packing group

| | |
|---|---|
| ADR | III |
| RID | III |
| IMDG | III |
| ICAO/IATA | III |

### 14.5. Environmental hazards

| | |
|---|---|
| Comment | Not relevant. |

### 14.6. Special precautions for user

| | |
|---|---|
| EmS | F-E, S-D |

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

## SECTION 15: Regulatory information

| | |
|---|---|
| EC no. | 215-535-7 |

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

| | |
|---|---|
| Other Label Information | Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. |
| Legislation and regulations | Dangerous Substance Directive 67/548/EEC.<br>The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).<br>The List of Wastes (England) (Amendment) Regulations 2005. (SI 2005 No. 895). Avfallsförordningen (2011:927). |

### 15.2. Chemical safety assessment

## SECTION 16: Other information

**Hazard symbol**




| | |
|---|---|
| R-phrases | R10 Flammable.<br>R38 Irritating to skin.<br>R20/22 Harmful by inhalation and if swallowed.<br>R38 Irritating to skin. |
| S-phrases | S7 Keep container tightly closed.<br>S16 Keep away from sources of ignition - No smoking. |
| Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] | Flam. Liq. 3; H226;<br>Acute tox. 4; H312;<br>Skin Irrit. 2; H315; |

| | |
|---|---|
| | Acute tox. 4; H332; |
| List of relevant R-phrases (under headings 2 and 3). | R38 Irritating to skin.<br>R11 Highly flammable.<br>R10 Flammable.<br>R20/21 Harmful by inhalation and in contact with skin.<br>R20 Harmful by inhalation. |
| List of relevant H-phrases (Section 2 and 3). | H332 Harmful if inhaled.<br>H312 Harmful in contact with skin.<br>H225 Highly flammable liquid and vapour.<br>H226 Flammable liquid and vapour.<br>H315 Causes skin irritation. |
| Responsible for safety data sheet | Fred Holmberg & Co AB |

# SAFETY DATA SHEET

Version 4.8
Revision Date 05/27/2016
Print Date 10/31/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : *trans*-1,2-Dichloroethylene

Product Number : D62209
Brand : Aldrich
Index-No. : 602-026-00-3

CAS-No. : 156-60-5

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 2), H225
Acute toxicity, Inhalation (Category 4), H332
Acute aquatic toxicity (Category 3), H402
Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H225 Highly flammable liquid and vapour.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.

| | |
|---|---|
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P312 | Call a POISON CENTER/doctor if you feel unwell. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

Synonyms : *trans*-1,2-Dichloroethene
*trans*-Acetylene dichloride

Formula : $C_2H_2Cl_2$
Molecular weight : 96.94 g/mol
CAS-No. : 156-60-5
EC-No. : 205-860-2
Index-No. : 602-026-00-3

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **trans-Dichloroethylene** | | |
| | Flam. Liq. 2; Acute Tox. 4; Aquatic Acute 3; Aquatic Chronic 3; H225, H332, H412 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture
No data available

### 5.3 Advice for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Use explosion-proof equipment.Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature 2 - 8 °C

Light sensitive. Air and moisture sensitive. Refrigerate before opening.

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| trans-Dichloroethylene | 156-60-5 | TWA | 200.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Central Nervous System impairment<br>Eye irritation | | |

| | | | | |
|---|---|---|---|---|
| | | TWA | 200.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Eye irritation | | |
| | | TWA | 200 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>Eye irritation | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**
Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid, clear<br>Colour: light yellow |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -50 °C (-58 °F) - lit. |
| f) | Initial boiling point and boiling range | 48 °C (118 °F) - lit. |
| g) | Flash point | 6.0 °C (42.8 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or | Upper explosion limit: 12.8 %(V)<br>Lower explosion limit: 9.7 %(V) |

| | | |
|---|---|---|
| | explosive limits | |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 1.257 g/mL at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
Vapours may form explosive mixture with air.

**10.4 Conditions to avoid**
Heat, flames and sparks. Extremes of temperature and direct sunlight.

**10.5 Incompatible materials**
Oxidizing agents, Bases

**10.6 Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 1,235 mg/kg

LD50 Oral - Mouse - 2,122 mg/kg
Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Somnolence (general depressed activity). Behavioral:Ataxia.

LC50 Inhalation - Rat - 24100 ppm
Remarks: Behavioral:Somnolence (general depressed activity).

LD50 Dermal - Rabbit - > 5,000 mg/kg
Remarks: Prolonged skin contact may cause skin irritation and/or dermatitis. Nutritional and Gross Metabolic:Weight loss or decreased weight gain.

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Skin irritation - 24 h

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Eye irritation

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: KV9400000

prolonged or repeated exposure can cause:, narcosis, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Kidney -

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 220.00 mg/l - 48 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**

UN number: 1150 Class: 3 Packing group: II
Proper shipping name: 1,2-Dichloroethylene
Reportable Quantity (RQ): 1000 lbs

Poison Inhalation Hazard: No

**IMDG**

UN number: 1150 Class: 3 Packing group: II EMS-No: F-E, S-D
Proper shipping name: 1,2-DICHLOROETHYLENE

**IATA**

UN number: 1150 Class: 3 Packing group: II
Proper shipping name: 1,2-Dichloroethylene

## 15. REGULATORY INFORMATION

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Fire Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| trans-Dichloroethylene | 156-60-5 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| trans-Dichloroethylene | 156-60-5 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| trans-Dichloroethylene | 156-60-5 | 1993-04-24 |

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Flam. Liq. | Flammable liquids |
| H225 | Highly flammable liquid and vapour. |
| H332 | Harmful if inhaled. |
| H402 | Harmful to aquatic life. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 3 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.8 Revision Date: 05/27/2016 Print Date: 10/31/2016

# SAFETY DATA SHEET

Version 4.6
Revision Date 03/02/2015
Print Date 02/18/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Trichloroethylene

Product Number : 251402
Brand : Sigma-Aldrich
Index-No. : 602-027-00-9

CAS-No. : 79-01-6

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Germ cell mutagenicity (Category 2), H341
Carcinogenicity (Category 1B), H350
Specific target organ toxicity - single exposure (Category 3), Central nervous system, H336
Acute aquatic toxicity (Category 3), H402
Chronic aquatic toxicity (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H341 Suspected of causing genetic defects.
H350 May cause cancer.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear eye protection/ face protection. |
| P280 | Wear protective gloves. |
| P281 | Use personal protective equipment as required. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 + P312 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P332 + P313 | If skin irritation occurs: Get medical advice/ attention. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| | | |
|---|---|---|
| Synonyms | : | TCE<br>Trichloroethene |
| Formula | : | $C_2HCl_3$ |
| Molecular weight | : | 131.39 g/mol |
| CAS-No. | : | 79-01-6 |
| EC-No. | : | 201-167-4 |
| Index-No. | : | 602-027-00-9 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Trichloroethylene** Included in the Candidate List of Substances of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH) | | |
| | Skin Irrit. 2; Eye Irrit. 2A; Muta. 2; Carc. 1B; STOT SE 3; Aquatic Acute 3; Aquatic Chronic 3; H315, H319, H336, H341, H350, H412 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Light sensitive. Handle and store under inert gas.
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Trichloroethylene | 79-01-6 | TWA | 10.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Central Nervous System impairment<br>cognitive decrement<br>Renal toxicity<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Suspected human carcinogen | | |
| | | STEL | 25.000000 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment<br>cognitive decrement<br>Renal toxicity<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Suspected human carcinogen | | |
| | | Potential Occupational Carcinogen<br>See Appendix C<br>See Appendix A | | |
| | | See Table Z-2 | | |
| | | TWA | 100.000000 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.19-1967 | | |
| | | CEIL | 200.000000 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.19-1967 | | |
| | | Peak | 300.000000 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |
| | | Z37.19-1967 | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| Trichloroethylene | 79-01-6 | Trichloroacetic acid | 15.0000 mg/l | Urine | ACGIH - Biological Exposure Indices (BEI) |
| | Remarks | End of shift at end of workweek | | | |
| | | Trichloroethanol | 0.5000 mg/l | In blood | ACGIH - Biological Exposure Indices (BEI) |
| | | End of shift at end of workweek | | | |
| | | Trichloroethylene | | In blood | ACGIH - Biological Exposure Indices (BEI) |
| | | End of shift at end of workweek | | | |
| | | Trichloroethylene | | In end-exhaled air | ACGIH - Biological Exposure Indices (BEI) |
| | | End of shift at end of workweek | | | |

## 8.2 Exposure controls

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

Splash contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 480 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: liquid, clear<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -84.8 °C (-120.6 °F) - lit. |
| f) | Initial boiling point and boiling range | 86.7 °C (188.1 °F) - lit. |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower | Upper explosion limit: 10.5 %(V) |

| | | |
|---|---|---|
| | flammability or explosive limits | Lower explosion limit: 8 %(V) |
| k) | Vapour pressure | 81.3 hPa (61.0 mmHg) at 20.0 °C (68.0 °F) |
| l) | Vapour density | No data available |
| m) | Relative density | 1.463 g/mL at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 2.29log Pow: 5 |
| p) | Auto-ignition temperature | 410.0 °C (770.0 °F) |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Oxidizing agents, Strong bases, Magnesium

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - 4,920 mg/kg

LC50 Inhalation - Mouse - 4 h - 8450 ppm

LD50 Dermal - Rabbit - > 20,000 mg/kg

No data available

**Skin corrosion/irritation**
Skin - Rabbit
Result: Severe skin irritation - 24 h

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Eye irritation - 24 h

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
Laboratory experiments have shown mutagenic effects.
In vitro tests showed mutagenic effects

**Carcinogenicity**

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Possible human carcinogen

| | |
|---|---|
| IARC: | 1 - Group 1: Carcinogenic to humans (Trichloroethylene) |
| NTP: | Reasonably anticipated to be a human carcinogen (Trichloroethylene) |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: KX4550000

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Exposure to and/or consumption of alcohol may increase toxic effects., Gastrointestinal disturbance, Kidney injury may occur., narcosis
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Pimephales promelas (fathead minnow) - 41 mg/l - 96.0 h |
| | LOEC - other fish - 11 mg/l - 10.0 d |
| | NOEC - Oryzias latipes - 40 mg/l - 10.0 d |
| Toxicity to daphnia and other aquatic invertebrates | EC50 - Daphnia magna (Water flea) - 18.00 mg/l - 48 h |
| Toxicity to algae | IC50 - Pseudokirchneriella subcapitata (green algae) - 175.00 mg/l - 96 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
Does not bioaccumulate.

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life with long lasting effects.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1710 Class: 6.1 Packing group: III
Proper shipping name: Trichloroethylene
Reportable Quantity (RQ): 100 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 1710 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: TRICHLOROETHYLENE

**IATA**
UN number: 1710 Class: 6.1 Packing group: III
Proper shipping name: Trichloroethylene

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Trichloroethylene | 79-01-6 | 2007-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Trichloroethylene | 79-01-6 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Trichloroethylene | 79-01-6 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Trichloroethylene | 79-01-6 | 2007-07-01 |

**California Prop. 65 Components**

| | | |
|---|---|---|
| WARNING! This product contains a chemical known to the State of California to cause cancer. Trichloroethylene | CAS-No. 79-01-6 | Revision Date 2011-09-01 |
| WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. | CAS-No. 79-01-6 | Revision Date 2011-09-01 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| Eye Irrit. | Eye irritation |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H341 | Suspected of causing genetic defects. |
| H350 | May cause cancer. |
| H402 | Harmful to aquatic life. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.6 Revision Date: 03/02/2015 Print Date: 02/18/2016

# SAFETY DATA SHEET
# CHROMIUM HARD,TRIVALENT

## 1. Identification

### Product identifier

**Product name** CHROMIUM HARD,TRIVALENT

**Product number** 2403

### Recommended use of the chemical and restrictions on use

**Application** Industrial Use

### Details of the supplier of the safety data sheet

**Supplier**

SIFCO Applied Surface Concepts
5708 E. Schaaf Road
Independence, Ohio 44131
U.S.A.
Tel.: +1 216-524-0099
Fax: +1 216-524-6331
E-Mail: info@sifcoasc.com

### Emergency telephone number

**Emergency telephone** CHEMTREC (United States) (800) 424-9300; CHEMTREC (International) +1 703-527-3887

## 2. Hazard(s) identification

### Classification of the substance or mixture

**Physical hazards** Not Classified

**Health hazards** Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335

**Environmental hazards** Aquatic Acute 3 - H402

### Label elements

**Pictogram**



**Signal word** Danger

**Hazard statements** H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H402 Harmful to aquatic life.

# CHROMIUM HARD,TRIVALENT

**Precautionary statements**

P260 Do not breathe vapor/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P363 Wash contaminated clothing before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/ container in accordance with national regulations.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P284 [In case of inadequate ventilation] wear respiratory protection.
P301+P310 If swallowed: Immediately call a poison center/ doctor.
P302+P352 If on skin: Wash with plenty of water.

**Contains** AMMONIUM FORMATE, CHROMIUM (III) SULPHATE, AMMONIA ...%

## Other hazards

This product does not contain any substances classified as PBT or vPvB.

## 3. Composition/information on ingredients

### Mixtures

**AMMONIUM FORMATE** **25-30%**

CAS number: 540-69-2

**Classification**
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
STOT SE 3 - H335

**AMMONIUM CHLORIDE** **5-10%**

CAS number: 12125-02-9

**Classification**
Acute Tox. 4 - H302
Eye Irrit. 2 - H319

**CHROMIUM (III) SULPHATE** **5-10%**

CAS number: 10101-53-8

**Classification**
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Corr. 1B - H314
Eye Dam. 1 - H318
STOT SE 3 - H335

# CHROMIUM HARD,TRIVALENT

| | |
|---|---|
| **Potassium Sulfate** | **1-5%** |
| CAS number: 7778-80-5 | |
| **Classification**<br>Not Classified | |

| | |
|---|---|
| **AMMONIA ...%** | **1-5%** |
| CAS number: 1336-21-6<br>M factor (Acute) = 1 | |
| **Classification**<br>Skin Corr. 1B - H314<br>Eye Dam. 1 - H318<br>STOT SE 3 - H335<br>Aquatic Acute 1 - H400 | |

| | |
|---|---|
| **SODIUM BROMIDE** | **<1%** |
| CAS number: 7647-15-6 | |
| **Classification**<br>Acute Tox. 4 - H312 | |

The full text for all hazard statements is displayed in Section 16.

## 4. First-aid measures

### Description of first aid measures

**Inhalation** Move affected person to fresh air at once. Get medical attention.

**Ingestion** Get medical attention immediately. Do not induce vomiting.

**Skin Contact** Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes and get medical attention.

**Eye contact** Remove affected person from source of contamination. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.

### Most important symptoms and effects, both acute and delayed

**Inhalation** Coughing, chest tightness, feeling of chest pressure.

**Ingestion** May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.

**Skin contact** May cause serious chemical burns to the skin.

**Eye contact** Causes severe burns. May cause serious eye damage.

### Indication of immediate medical attention and special treatment needed

**Notes for the doctor** No specific recommendations.

## 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.

### Special hazards arising from the substance or mixture

# CHROMIUM HARD,TRIVALENT

**Specific hazards** Corrosive gases or vapors.

### Advice for firefighters

**Protective actions during firefighting** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapors. Provide adequate general and local exhaust ventilation.

### Environmental precautions

**Environmental precautions** Do not discharge into drains or watercourses or onto the ground. Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

### Methods and material for containment and cleaning up

**Methods for cleaning up** Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and dispose of spillage as indicated in Section 13. Wash thoroughly after dealing with a spillage.

**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

## 7. Handling and storage

### Precautions for safe handling

**Usage precautions** Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapors and spray/mists. Provide adequate general and local exhaust ventilation.

### Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place. Protect from freezing and direct sunlight.

**Storage class** Corrosive storage.

### Specific end uses(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.

## 8. Exposure controls/Personal protection

### Exposure controls

**Protective equipment**



**Appropriate engineering controls** As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapor or mist.

**Eye/face protection** Tight-fitting safety glasses.

# CHROMIUM HARD,TRIVALENT

| | |
|---|---|
| **Hand protection** | It is recommended that chemical-resistant, impervious gloves are worn. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. It is recommended that gloves are made of the following material: Nitrile rubber. |
| **Other skin and body protection** | Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible. |
| **Hygiene measures** | Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. |
| **Respiratory protection** | If ventilation is inadequate, suitable respiratory protection must be worn. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. |

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

| | |
|---|---|
| **Appearance** | Liquid. |
| **Color** | Dark. Blue. |
| **Odor** | Acidic. |
| **pH** | pH (concentrated solution): 6.0-7.0 |
| **Initial boiling point and range** | 100°C/212°F @ |
| **Relative density** | 1.150-1.180 |
| **Other information** | Not available. |

## 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | There are no known reactivity hazards associated with this product. |
| **Stability** | Stable at normal ambient temperatures and when used as recommended. |
| **Possibility of hazardous reactions** | Under normal conditions of storage and use, no hazardous reactions will occur. |
| **Conditions to avoid** | Avoid excessive heat for prolonged periods of time. |
| **Materials to avoid** | None known. |
| **Hazardous decomposition products** | None at ambient temperatures. |

## 11. Toxicological information

### Information on toxicological effects

**Acute toxicity - oral**

| | |
|---|---|
| **ATE oral (mg/kg)** | 4,284.49 |

**Acute toxicity - dermal**

| | |
|---|---|
| **ATE dermal (mg/kg)** | 19,400.35 |

**Acute toxicity - inhalation**

| | |
|---|---|
| **ATE inhalation (vapours mg/l)** | 194.0 |

# CHROMIUM HARD,TRIVALENT

| | |
|---|---|
| **Inhalation** | Vapors irritate the respiratory system. |
| **Ingestion** | Causes severe burns. May cause chemical burns in mouth, esophagus and stomach. |
| **Skin Contact** | May cause serious chemical burns to the skin. |
| **Eye contact** | Causes serious eye damage. Immediate first aid is imperative. |
| **Acute and chronic health hazards** | May cause burns in mucous membranes, throat, esophagus and stomach. |
| **Route of exposure** | Ingestion Inhalation Skin and/or eye contact |

**Toxicological information on ingredients.**

**AMMONIUM FORMATE**

| | |
|---|---|
| **Acute toxicity - oral** | |
| **Acute toxicity oral ($LD_{50}$ mg/kg)** | 2,250.0 |
| **Species** | Mouse |
| **ATE oral (mg/kg)** | 2,250.0 |

**CHROMIUM (III) SULPHATE**

| | |
|---|---|
| **Acute toxicity - oral** | |
| **ATE oral (mg/kg)** | 500.0 |
| **Acute toxicity - dermal** | |
| **ATE dermal (mg/kg)** | 1,100.0 |
| **Acute toxicity - inhalation** | |
| **ATE inhalation (vapours mg/l)** | 11.0 |

**Potassium Sulfate**

| | |
|---|---|
| **Acute toxicity - oral** | |
| **Acute toxicity oral ($LD_{50}$ mg/kg)** | 6,600.0 |
| **Species** | Rat |
| **ATE oral (mg/kg)** | 6,600.0 |

**AMMONIA ...%**

| | |
|---|---|
| **Acute toxicity - oral** | |
| **Acute toxicity oral ($LD_{50}$ mg/kg)** | 350.0 |
| **Species** | Rat |

**SODIUM BROMIDE**

**Acute toxicity - oral**

| | |
|---|---|
| **Acute toxicity oral ($LD_{50}$ mg/kg)** | 3,500.0 |
| **Species** | Rat |
| **ATE oral (mg/kg)** | 3,500.0 |

**Acute toxicity - dermal**

| | |
|---|---|
| **Acute toxicity dermal ($LD_{50}$ mg/kg)** | 2,000.0 |
| **Species** | Rabbit |
| **ATE dermal (mg/kg)** | 2,000.0 |

## 12. Ecological information

**Ecotoxicity** The product contains a substance which may have hazardous effects on the environment.

**Toxicity** No data available.

**Ecological information on ingredients.**

**Potassium Sulfate**

**Acute aquatic toxicity**

**Acute toxicity - fish** $LC_{50}$, 96 hour: 680 mg/l, Pimephales promelas (Fat-head Minnow)

**AMMONIA ...%**

**Acute aquatic toxicity**

| | |
|---|---|
| **$LE(C)_{50}$** | 0.1 < L(E)C50 ≤ 1 |
| **M factor (Acute)** | 1 |
| **Acute toxicity - fish** | $LC_{50}$, 96 hours: 0.53 mg/l, Freshwater fish<br>$LC_{50}$, 96 hours: 0.75 -3.4 mg/l, Freshwater fish<br>$LC_{50}$, 96 hours: 8.2 mg/l, Freshwater fish |
| **Acute toxicity - aquatic invertebrates** | $EC_{50}$, 48 hours: 0.66 mg/l, Daphnia magna |

**SODIUM BROMIDE**

**Acute aquatic toxicity**

| | |
|---|---|
| **Acute toxicity - fish** | NOEC, 96 hour: 7800 mg/l, Oryzias latipes (Red killifish)<br>$LC_{50}$, 96 hour: 160,000 mg/l, Poecilia reticulata (Guppy) |
| **Acute toxicity - aquatic invertebrates** | NOEC, 48 hour: 7800 mg/l, Daphnia magna<br>$EC_{50}$, 48 hours: 5800 mg/l, Daphnia magna |

**Persistence and degradability**

**Persistence and degradability** No data available.

**Bioaccumulative potential**

**Bio-Accumulative Potential** The product does not contain any substances expected to be bioaccumulating.

**Mobility in soil**

**Mobility** The product is soluble in water.

# CHROMIUM HARD,TRIVALENT

### Other adverse effects

**Other adverse effects** Not determined.

## 13. Disposal considerations

### Waste treatment methods

**General information** Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## 14. Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

### UN Number

**UN No. (International)** Not applicable.

### UN proper shipping name

**Proper shipping name (International)** Not applicable.

**Proper shipping name (DOT)** NOT RESTRICTED LIQUID

### Transport hazard class(es)

**Transport Labels (International)** No transport warning sign required.

### Packing group

**Packing group (International)** Not applicable.

### Environmental hazards

**Environmentally Hazardous Substance**
No.

### Special precautions for user

Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

## 15. Regulatory information

**National regulations** The customer is advised to check if there are specific local or national regulations specifically applicable to the chemicals contained in the product. The hazards statement for this product is in accordance with international regulations, always observing the most stringent requirements.

### US Federal Regulations

**SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities**
Exempt.

# CHROMIUM HARD,TRIVALENT

### CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

Ammonium Chloride
Final CERCLA RQ: 5,000 lbs
Chromium Sulphate
Final CERCLA RQ: 1,000 lbs

### SARA Extremely Hazardous Substances EPCRA Reportable Quantities

Exempt.

### SARA 313 Emission Reporting

Chromium Sulphate

### CAA Accidental Release Prevention

HAP
Chromium Sulphate

### SARA (311/312) Hazard Categories

Acute
Chronic

### OSHA Highly Hazardous Chemicals

Exempt.

## US State Regulations

### California Proposition 65 Carcinogens and Reproductive Toxins

Chromium Sulphate

### California Directors List of Hazardous Substances

Ammonium Chloride
Chromium Sulphate

## Inventories

### US - TSCA

All ingredients are present.

## 16. Other information

| | |
|---|---|
| **Classification abbreviations and acronyms** | Acute Tox. = Acute toxicity<br>Carc. = Carcinogenicity<br>Eye Dam. = Serious eye damage<br>Eye Irrit. = Eye irritation<br>Flam. Liq. = Flammable liquid<br>Muta. = Germ cell mutagenicity<br>Resp. Sens. = Respiratory sensitisation<br>Skin Corr. = Skin corrosion<br>Skin Irrit. = Skin irritation<br>Skin Sens. = Skin sensitisation<br>STOT RE = Specific target organ toxicity-repeated exposure<br>STOT SE = Specific target organ toxicity-single exposure |
| **Revision date** | 8/10/2018 |
| **Revision** | 3 |

# CHROMIUM HARD,TRIVALENT

| | |
|---|---|
| **Hazard statements in full** | H302 Harmful if swallowed.<br>H312 Harmful in contact with skin.<br>H314 Causes severe skin burns and eye damage.<br>H315 Causes skin irritation.<br>H318 Causes serious eye damage.<br>H319 Causes serious eye irritation.<br>H332 Harmful if inhaled.<br>H335 May cause respiratory irritation.<br>H400 Very toxic to aquatic life.<br>H402 Harmful to aquatic life. |
| **NFPA - health hazard** | Extremely hazardous, serious injury. (3) |
| **NFPA - flammability hazard** | Will not burn. (0) |
| **NFPA - instability hazard** | Normally stable. (0) |

The Information in this data sheet is believed to be correct but neither we nor our employees or agents give any warranty or make any representation to the accuracy thereof and accept no liability for any loss, injury or damage which may result in it's use. The sole purpose of this data sheet is to provide guidance on the safe handling and use of the products to which it relates. It does not form part of any product specification nor part of any contract. It is not practical for the guidance and information in this data sheet to cover every conceivable application of a product and as we may not be aware of the use to which the products covered by this data sheet are to be put it remains the responsibility of the user to conduct it's own tests and to satisy itself as to the suitability of the product.

# SAFETY DATA SHEET

Version 5.8
Revision Date 03/13/2015
Print Date 01/29/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Vanadium(V) oxide

Product Number : 204854
Brand : Aldrich
Index-No. : 023-001-00-8

CAS-No. : 1314-62-1

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Serious eye damage (Category 1), H318
Germ cell mutagenicity (Category 2), H341
Reproductive toxicity (Category 2), H361
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Specific target organ toxicity - repeated exposure (Category 1), H372
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H302 + H332 Harmful if swallowed or if inhaled
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H361 Suspected of damaging fertility or the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.

| | |
|---|---|
| H411 | Toxic to aquatic life with long lasting effects. |

Precautionary statement(s)

| | |
|---|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301 + P312 + P330 | IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P305 + P351 + P338 + P310 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. |
| P308 + P313 | IF exposed or concerned: Get medical advice/ attention. |
| P391 | Collect spillage. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS** - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Formula | : | $O_5V_2$ |
| Molecular weight | : | 181.88 g/mol |
| CAS-No. | : | 1314-62-1 |
| EC-No. | : | 215-239-8 |
| Index-No. | : | 023-001-00-8 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Vanadium pentoxide** | | |
| | Acute Tox. 4; Eye Dam. 1; Muta. 2; Repr. 2; STOT SE 3; STOT RE 1; Aquatic Acute 2; Aquatic Chronic 2; H302 + H332, H318, H335, H341, H361, H372, H411 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**
No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Vanadium/vanadium oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.
Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Vanadium pentoxide | 1314-62-1 | C | 0.100000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | C | 0.500000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | Remarks | Ceiling limit is to be determined from breathing-zone air samples. | | |
| | | TWA | 0.050000 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Lower Respiratory Tract irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Confirmed animal carcinogen with unknown relevance to humans | | |
| | | TWA | 0.05 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) |
| | | Upper Respiratory Tract irritation<br>Lower Respiratory Tract irritation<br>Substances for which there is a Biological Exposure Index or Indices (see BEI® section)<br>Confirmed animal carcinogen with unknown relevance to humans | | |
| | | C | 0.050000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | 15 minute ceiling value | | |
| | | C | 0.050000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | 15 minute ceiling value | | |
| | | C | 0.100000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Ceiling limit is to be determined from breathing-zone air samples. | | |
| | | C | 0.500000 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | Ceiling limit is to be determined from breathing-zone air samples. | | |
| | | C | 0.050000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | 15 minute ceiling value | | |
| | | C | 0.050000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | 15 minute ceiling value | | |
| | | C | 0.050000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | 15 minute ceiling value | | |
| | | C | 0.050000 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | 15 minute ceiling value | | |

**Biological occupational exposure limits**

| Component | CAS-No. | Parameters | Value | Biological specimen | Basis |
|---|---|---|---|---|---|
| Vanadium pentoxide | 1314-62-1 | Vanadium | 0.0500 mg/g | In urine | |
| | Remarks | End of shift at end of workweek | | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: solid |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 690 °C (1,274 °F) - lit. |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point | Not applicable |

| | | |
|---|---|---|
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 3.35 g/mL at 25 °C (77 °F) |
| n) | Water solubility | 904 g/l at 20 °C (68 °F) - OECD Test Guideline 105 |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | The substance or mixture is not classified as oxidizing. |

**9.2 Other safety information**

| | |
|---|---|
| Solubility in other solvents | Ethanol - insoluble |

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
No data available

**10.5 Incompatible materials**
Strong acids

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
Harmful if swallowed. Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

LC50 Inhalation - Rat - female - 4 h - 2.21 mg/l
(OECD Test Guideline 403)

LC50 Dermal - Rat - > 2,500 mg/kg
(OECD Test Guideline 402)

No data available

**Skin corrosion/irritation**
Skin - in vitro assay
Result: No skin irritation

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Risk of serious damage to eyes.
(OECD Test Guideline 405)

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
Laboratory experiments have shown mutagenic effects.
In vitro tests showed mutagenic effects

**Carcinogenicity**

No data available

| | |
|---|---|
| IARC: | 2B - Group 2B: Possibly carcinogenic to humans (Vanadium pentoxide) |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| OSHA: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

**Reproductive toxicity**
Possible risk of congenital malformation in the fetus.
Suspected human reproductive toxicant

No data available

**Specific target organ toxicity - single exposure**
May cause respiratory irritation.
Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

**Specific target organ toxicity - repeated exposure**
Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard**
No data available

**Additional Information**
RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach - Irregularities - Based on Human Evidence
Stomach - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Oncorhynchus mykiss (rainbow trout) - 5.2 mg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | LC50 - Daphnia magna (Water flea) - 1.52 mg/l - 48 h |

### 12.2 Persistence and degradability
No data available

### 12.3 Bioaccumulative potential
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**
Toxic to aquatic life with long lasting effects.
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

**Product**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 2862 Class: 6.1 Packing group: III
Proper shipping name: Vanadium pentoxide
Reportable Quantity (RQ): 1000 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 2862 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: VANADIUM PENTOXIDE
Marine pollutant:yes

**IATA**
UN number: 2862 Class: 6.1 Packing group: III
Proper shipping name: Vanadium pentoxide

## 15. REGULATORY INFORMATION

**SARA 302 Components**
The following components are subject to reporting levels established by SARA Title III, Section 302:

| | CAS-No. | Revision Date |
|---|---|---|
| Vanadium pentoxide | 1314-62-1 | 2007-07-01 |

**SARA 313 Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Vanadium pentoxide | 1314-62-1 | 2007-07-01 |

The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Vanadium pentoxide | 1314-62-1 | 2007-07-01 |

**SARA 311/312 Hazards**
Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Vanadium pentoxide | 1314-62-1 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Vanadium pentoxide | 1314-62-1 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Vanadium pentoxide | 1314-62-1 | 2007-07-01 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| Vanadium pentoxide | 1314-62-1 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Eye Dam. | Serious eye damage |
| H302 | Harmful if swallowed. |
| H302 + H332 | Harmful if swallowed or if inhaled |
| H318 | Causes serious eye damage. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H341 | Suspected of causing genetic defects. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H401 | Toxic to aquatic life. |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 4 |
| Chronic Health Hazard: | * |
| Flammability: | 0 |
| Physical Hazard | 0 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 3 |
| Fire Hazard: | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 5.8 Revision Date: 03/13/2015 Print Date: 01/29/2016

# SAFETY DATA SHEET

Version 3.11
Revision Date 12/01/2015
Print Date 02/18/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Vinyl chloride

Product Number : 387622
Brand : Aldrich
Index-No. : 602-023-00-7

CAS-No. : 75-01-4

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable gases (Category 1), H220
Gases under pressure (Liquefied gas), H280
Carcinogenicity (Category 1A), H350

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.
H350 May cause cancer.

Precautionary statement(s)
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P281 Use personal protective equipment as required.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

| | |
|---|---|
| P377 | Leaking gas fire: Do not extinguish, unless leak can be stopped safely. |
| P381 | Eliminate all ignition sources if safe to do so. |
| P405 | Store locked up. |
| P410 + P403 | Protect from sunlight. Store in a well-ventilated place. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

**2.3 Hazards not otherwise classified (HNOC) or not covered by GHS**

May form explosive peroxides.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Substances**

| | | |
|---|---|---|
| Synonyms | : | Chloroethylene |
| Formula | : | $C_2H_3Cl$ |
| Molecular weight | : | 62.50 g/mol |
| CAS-No. | : | 75-01-4 |
| EC-No. | : | 200-831-0 |
| Index-No. | : | 602-023-00-7 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Vinyl chloride** | | |
| | Flam. Gas 1; Press. Gas Liquefied gas; Carc. 1A; SA ; H220, H280, H350, | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

**4.1 Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available

## 5. FIREFIGHTING MEASURES

**5.1 Extinguishing media**

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**

Carbon oxides, Hydrogen chloride gas

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information
Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

### 6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3 Methods and materials for containment and cleaning up
Clean up promptly by sweeping or vacuum.

### 6.4 Reference to other sections
For disposal see section 13.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling
Avoid inhalation of vapour or mist.
Use explosion-proof equipment.Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

Contents under pressure. Light sensitive.

### 7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**Components with workplace control parameters**

| Component | CAS-No. | Value | Control parameters | Basis |
|---|---|---|---|---|
| Vinyl chloride | 75-01-4 | TWA | 1 ppm | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| | | TWA | 1 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | Remarks | Liver damage<br>Lung cancer<br>Confirmed human carcinogen | | |
| | | STEL | 5 ppm | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| | | TWA | 1 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | STEL | 5 ppm | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | See 1910.1017 | | |
| | | Potential Occupational Carcinogen<br>See Appendix A | | |

### 8.2 Exposure controls

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Splash contact
Material: Fluorinated rubber
Minimum layer thickness: 0.7 mm
Break through time: 120 min
Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: Liquefied gas |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: -153.8 °C (-244.8 °F) - lit. |
| f) | Initial boiling point and boiling range | -13.4 °C (7.9 °F) - lit. |
| g) | Flash point | -61.0 °C (-77.8 °F) - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or | Upper explosion limit: 33 %(V)<br>Lower explosion limit: 3.6 %(V) |

| | | |
|---|---|---|
| | explosive limits | |
| k) | Vapour pressure | No data available |
| l) | Vapour density | No data available |
| m) | Relative density | 0.911 g/cm3 at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | No data available |
| p) | Auto-ignition temperature | No data available |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.
Contains the following stabiliser(s):
Hydroquinone (>=0 - <=0.0001 %)
Phenol (>=0 - <=0.01 %)

**10.3 Possibility of hazardous reactions**
No data available

**10.4 Conditions to avoid**
Heat, flames and sparks. Extremes of temperature and direct sunlight.

**10.5 Incompatible materials**
Chemically active metals, Copper

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
No data available

LC50 Inhalation - Rat - 0.3 h - 180000 ppm
Remarks: Behavioral:Tremor. Behavioral:Convulsions or effect on seizure threshold. Respiratory disorder

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

Human carcinogen.

| | |
|---|---|
| IARC: | 1 - Group 1: Carcinogenic to humans (Vinyl chloride) |
| NTP: | Known to be human carcinogen (Vinyl chloride) |
| OSHA: | OSHA specifically regulated carcinogen (Vinyl chloride) |

**Reproductive toxicity**
No data available

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: KU9625000

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Central nervous system -
Stomach - Irregularities - Based on Human Evidence (Phenol)
Liver - Irregularities - Based on Human Evidence

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**
No data available

**12.2 Persistence and degradability**
No data available

**12.3 Bioaccumulative potential**
No data available

**12.4 Mobility in soil**
No data available

**12.5 Results of PBT and vPvB assessment**
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

No data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1086 Class: 2.1
Proper shipping name: Vinyl chloride, stabilized
Reportable Quantity (RQ): 1 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 1086 Class: 2.1 EMS-No: F-D, S-U
Proper shipping name: VINYL CHLORIDE, STABILIZED

**IATA**
UN number: 1086 Class: 2.1
Proper shipping name: Vinyl chloride, stabilized
IATA Passenger: Not permitted for transport

## 15. REGULATORY INFORMATION

**SARA 302 Components**
The following components are subject to reporting levels established by SARA Title III, Section 302:

| | CAS-No. | Revision Date |
|---|---|---|
| Phenol | 108-95-2 | 2007-07-01 |
| Hydroquinone | 123-31-9 | 2007-07-01 |

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Vinyl chloride | 75-01-4 | 2007-07-01 |

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Vinyl chloride | 75-01-4 | 2007-07-01 |
| Phenol | 108-95-2 | 2007-07-01 |
| Hydroquinone | 123-31-9 | 2007-07-01 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Vinyl chloride | 75-01-4 | 2007-07-01 |
| Phenol | 108-95-2 | 2007-07-01 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Vinyl chloride | 75-01-4 | 2007-07-01 |

**California Prop. 65 Components**

| WARNING! This product contains a chemical known to the State of California to cause cancer. | CAS-No. | Revision Date |
|---|---|---|
| Vinyl chloride | 75-01-4 | 2007-09-28 |

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| | May displace oxygen and cause rapid suffocation. |
| Carc. | Carcinogenicity |
| Flam. Gas | Flammable gases |
| H220 | Extremely flammable gas. |
| H280 | Contains gas under pressure; may explode if heated. |
| H350 | May cause cancer. |
| Press. Gas | Gases under pressure |
| SA | Simple Asphyxiant |

**HMIS Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Chronic Health Hazard: | * |
| Flammability: | 4 |
| Physical Hazard | 3 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 2 |
| Fire Hazard: | 4 |
| Reactivity Hazard: | 0 |

**Further information**

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**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 3.11 Revision Date: 12/01/2015 Print Date: 02/18/2016

# SAFETY DATA SHEET

**Creation Date** 22-Sep-2009 **Revision Date** 25-Apr-2019 **Revision Number** 6

## 1. Identification

**Product Name** **Vinylidene chloride, stabilized**

**Cat No. :** **AC172290000; AC172290010; AC172290025; AC172290250**

**CAS-No** 75-35-4
**Synonyms** 1,1-Dichloroethylene

**Recommended Use** Laboratory chemicals.
**Uses advised against** Food, drug, pesticide or biocidal product use.

**Details of the supplier of the safety data sheet**

**Company**

Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

**Emergency Telephone Number**
For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
Emergency Number **US:**001-201-796-7100 / **Europe:** +32 14 57 52 99
**CHEMTREC** Tel. No.**US:**001-800-424-9300 / **Europe:**001-703-527-3887

## 2. Hazard(s) identification

**Classification**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Flammable liquids | Category 1 |
| Acute oral toxicity | Category 4 |
| Acute Inhalation Toxicity - Vapors | Category 4 |
| Serious Eye Damage/Eye Irritation | Category 2 |
| Carcinogenicity | Category 2 |
| Specific target organ toxicity - (repeated exposure) | Category 2 |
| Target Organs - Nasal Cavities, Liver. | |

**Label Elements**

**Signal Word**
Danger

**Hazard Statements**
Extremely flammable liquid and vapor
Causes serious eye irritation

Suspected of causing cancer
May cause damage to organs through prolonged or repeated exposure
Harmful if swallowed or if inhaled



**Precautionary Statements**
**Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
**Response**
IF exposed or concerned: Get medical attention/advice
**Inhalation**
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
**Skin**
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
**Eyes**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
**Ingestion**
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
**Fire**
In case of fire: Use CO2, dry chemical, or foam for extinction
**Storage**
Store locked up
Store in a well-ventilated place. Keep cool
**Disposal**
Dispose of contents/container to an approved waste disposal plant
**Hazards not otherwise classified (HNOC)**
Toxic to aquatic life with long lasting effects
WARNING. Cancer - https://www.p65warnings.ca.gov/.

## 3. Composition/Information on Ingredients

| Component | CAS-No | Weight % |
|---|---|---|
| Vinylidene chloride | 75-35-4 | >95 |
| 4-Methoxyphenol | 150-76-5 | 0.02 |

## 4. First-aid measures

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

**Inhalation** Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion** Do NOT induce vomiting. Get medical attention.

**Most important symptoms and effects** Difficulty in breathing. . Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

**Notes to Physician** Treat symptomatically

## 5. Fire-fighting measures

**Suitable Extinguishing Media** Water spray. Carbon dioxide ($CO_2$). Dry chemical. Water mist may be used to cool closed containers. Chemical foam. Water mist may be used to cool closed containers.

**Unsuitable Extinguishing Media** No information available

**Flash Point** -25 °C / -13 °F

**Method -** No information available

**Autoignition Temperature** 520 °C / 968 °F

**Explosion Limits**

| | |
|---|---|
| **Upper** | 16.5% |
| **Lower** | 8.4% |
| **Sensitivity to Mechanical Impact** | No information available |
| **Sensitivity to Static Discharge** | No information available |

**Specific Hazards Arising from the Chemical**
Extremely flammable. Vapors may travel to source of ignition and flash back. Vapors may form explosive mixture with air. Containers may explode when heated. Vapors may form explosive mixtures with air.

**Hazardous Combustion Products**
Carbon monoxide (CO). Carbon dioxide ($CO_2$). Formaldehyde. peroxides. Hydrogen chloride gas.

**Protective Equipment and Precautions for Firefighters**
Vapors are heavier than air and may spread along floors. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

| Health | Flammability | Instability | Physical hazards |
|---|---|---|---|
| 2 | 4 | 1 | N/A |

## 6. Accidental release measures

**Personal Precautions** Remove all sources of ignition. Take precautionary measures against static discharges.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information. Avoid release to the environment. Collect spillage.

**Methods for Containment and Clean Up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not let this chemical enter the environment.

## 7. Handling and storage

**Handling**

Ensure adequate ventilation. Wear personal protective equipment/face protection. Avoid contact with skin and eyes. Take precautionary measures against static discharges. Do not ingest. If swallowed then seek immediate medical assistance. Handle product only in closed system or provide appropriate exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. Do not subject to grinding/shock/friction. Avoid breathing dust/fume/gas/mist/vapors/spray. Keep away from open flames, hot surfaces and sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

**Storage**

Refrigerator/flammables. Keep away from heat, sparks and flame. Protect from light. May form explosive peroxides on prolonged storage. Keep under nitrogen. Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH | Mexico OEL (TWA) |
|---|---|---|---|---|
| Vinylidene chloride | TWA: 5 ppm | (Vacated) TWA: 1 ppm<br>(Vacated) TWA: 4 mg/m³ | | TWA: 5 ppm |
| 4-Methoxyphenol | TWA: 5 mg/m³ | (Vacated) TWA: 5 mg/m³ | TWA: 5 mg/m³ | TWA: 5 mg/m³ |

*Legend*

*ACGIH - American Conference of Governmental Industrial Hygienists*
*OSHA - Occupational Safety and Health Administration*
*NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health*

**Engineering Measures**

Use explosion-proof electrical/ventilating/lighting/equipment. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

| | |
|---|---|
| **Physical State** | Liquid |
| **Appearance** | Colorless |
| **Odor** | aromatic |
| **Odor Threshold** | No information available |
| **pH** | 7 2.5 g/l aq.sol |
| **Melting Point/Range** | -122 °C / -187.6 °F |
| **Boiling Point/Range** | 31.2 - 32 °C / 88.2 - 89.6 °F @ 760 mmHg |
| **Flash Point** | -25 °C / -13 °F |
| **Evaporation Rate** | No information available |
| **Flammability (solid,gas)** | Not applicable |
| **Flammability or explosive limits** | |

| | |
|---|---|
| **Upper** | 16.5% |
| **Lower** | 8.4% |
| **Vapor Pressure** | 665 mbar @ 20 °C |
| **Vapor Density** | 3.4 (Air = 1.0) |
| **Specific Gravity** | 1.218 |
| **Solubility** | No information available |
| **Partition coefficient; n-octanol/water** | No data available |
| **Autoignition Temperature** | 520 °C / 968 °F |
| **Decomposition Temperature** | No information available |
| **Viscosity** | .377 mPa.s at 15 °C |
| **Molecular Formula** | C2 H2 Cl2 |
| **Molecular Weight** | 96.94 |

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

**Stability** May form explosive peroxides. Hazardous polymerization may occur upon depletion of inhibitor. Moisture sensitive. Air sensitive. Light sensitive.

**Conditions to Avoid** Keep away from open flames, hot surfaces and sources of ignition. Excess heat. Exposure to air. Exposure to light. Incompatible products. Exposure to moist air or water.

**Incompatible Materials** Strong oxidizing agents, Strong bases, Finely powdered metals, oxygen, Peroxides, Metals, copper, Finely powdered metals, Acids

**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide ($CO_2$), Formaldehyde, peroxides, Hydrogen chloride gas

**Hazardous Polymerization** Hazardous polymerization may occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

**Acute Toxicity**

**Product Information**

**Oral LD50** Category 4. ATE = 300 - 2000 mg/kg.

**Vapor LC50** Category 4. ATE = 10 - 20 mg/l.

**Component Information**

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Vinylidene chloride | LD50 = 1500 mg/kg ( Rat )<br>LD50 = 200 mg/kg ( Rat ) | Not listed | LC50 = 1.66 mg/L ( Rat ) 4 h<br>LC50 = 6350 ppm ( Rat ) 4 h |
| 4-Methoxyphenol | 1600 mg/kg (Rat) | LD50 > 2000 mg/kg ( Rabbit ) | Not listed |

**Toxicologically Synergistic Products** No information available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Irritation** May cause skin, eye, and respiratory tract irritation

**Sensitization** No information available

**Carcinogenicity** Limited evidence of a carcinogenic effect. The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---|---|---|---|---|---|---|
| Vinylidene chloride | 75-35-4 | Group 2B | Not listed | Not listed | X | Not listed |
| 4-Methoxyphenol | 150-76-5 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** Ames test: positive.

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known
**STOT - repeated exposure** Nasal Cavities Liver

**Aspiration hazard** No information available

**Symptoms / effects,both acute and delayed** Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

## 12. Ecological information

**Ecotoxicity**

The product contains following substances which are hazardous for the environment. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|---|---|---|---|---|
| Vinylidene chloride | Not listed | LC50: 161 - 179 mg/L, 96h static (Pimephales promelas)<br>LC50: 57 - 91 mg/L, 96h static (Lepomis macrochirus)<br>LC50: 85 - 117 mg/L, 96h flow-through (Pimephales promelas) | EC50 > 2000 mg/L 17 h | LC50: 62 - 110 mg/L, 48h Static (Daphnia magna)<br>LC50: 9.0 - 14.0 mg/L, 48h Static (Daphnia magna) |
| 4-Methoxyphenol | Not listed | LC50: = 28.5 mg/L, 96h flow-through (Oncorhynchus mykiss)<br>LC50: = 84.3 mg/L, 96h flow-through (Pimephales promelas) | EC50 = 3.66 mg/L 5 min<br>EC50 = 4.30 mg/L 15 min<br>EC50 = 4.61 mg/L 30 min | Not listed |

**Persistence and Degradability** No information available

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its volatility.

| Component | log Pow |
|---|---|
| Vinylidene chloride | 2.02 |
| 4-Methoxyphenol | 1.3 |

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

| Component | RCRA - U Series Wastes | RCRA - P Series Wastes |
|---|---|---|
| Vinylidene chloride - 75-35-4 | U078 | - |

## 14. Transport information

**DOT**

| | |
|---|---|
| **UN-No** | UN1303 |
| **Proper Shipping Name** | VINYLIDENE CHLORIDE, STABILIZED |
| **Hazard Class** | 3 |
| **Packing Group** | I |

**TDG**

| | |
|---|---|
| **UN-No** | UN1303 |
| **Proper Shipping Name** | VINYLIDENE CHLORIDE, STABILIZED |
| **Hazard Class** | 3 |
| **Packing Group** | I |

**IATA**

| | |
|---|---|
| **UN-No** | UN1303 |
| **Proper Shipping Name** | VINYLIDENE CHLORIDE, STABILIZED |
| **Hazard Class** | 3 |
| **Packing Group** | I |

**IMDG/IMO**

| | |
|---|---|
| **UN-No** | UN1303 |
| **Proper Shipping Name** | VINYLIDENE CHLORIDE, STABILIZED |
| **Hazard Class** | 3 |
| **Subsidiary Hazard Class** | P |
| **Packing Group** | I |

## 15. Regulatory information

**United States of America Inventory**

| Component | CAS-No | TSCA | TSCA Inventory notification - Active/Inactive | TSCA - EPA Regulatory Flags |
|---|---|---|---|---|
| Vinylidene chloride | 75-35-4 | X | ACTIVE | - |
| 4-Methoxyphenol | 150-76-5 | X | ACTIVE | - |

**Legend:**
**TSCA** - Toxic Substances Control Act, (40 CFR Part 710)
X - Listed
'-' - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

**International Inventories**
Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

| Component | CAS-No | DSL | NDSL | EINECS | PICCS | ENCS | AICS | IECSC | KECL |
|---|---|---|---|---|---|---|---|---|---|
| Vinylidene chloride | 75-35-4 | X | - | 200-864-0 | X | X | X | X | KE-10122 |
| 4-Methoxyphenol | 150-76-5 | X | - | 205-769-8 | X | X | X | X | KE-23353 |

**U.S. Federal Regulations**

**SARA 313**

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---|---|---|---|
| Vinylidene chloride | 75-35-4 | >95 | 1.0 |

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)**

| Component | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|---|---|---|---|---|
| Vinylidene chloride | X | 100 lb | X | X |

**Clean Air Act**

| Component | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|---|---|---|---|
| Vinylidene chloride | X | | - |

**OSHA** - Occupational Safety and Health Administration: Not applicable

**CERCLA**: This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Component | Hazardous Substances RQs | CERCLA EHS RQs |
|---|---|---|
| Vinylidene chloride | 100 lb 1 lb | - |

**California Proposition 65**: This product contains the following Proposition 65 chemicals.

| Component | CAS-No | California Prop. 65 | Prop 65 NSRL | Category |
|---|---|---|---|---|
| Vinylidene chloride | 75-35-4 | Carcinogen | 0.88 µg/day | Carcinogen |

**U.S. State Right-to-Know Regulations**

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Vinylidene chloride | X | X | X | X | X |
| 4-Methoxyphenol | X | X | X | - | X |

**U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**: This product contains the following DHS chemicals:
**Legend** - STQs = Screening Threshold Quantities, APA = A placarded amount

| Component | DHS Chemical Facility Anti-Terrorism Standard |
|---|---|
| Vinylidene chloride | Release STQs - 10000lb |

**Other International Regulations**

**Mexico - Grade**: No information available

## 16. Other information

**Prepared By**
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

**Creation Date** 22-Sep-2009
**Revision Date** 25-Apr-2019
**Print Date** 25-Apr-2019
**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text**

# End of SDS

# Safety Data Sheet
## acc. to OSHA HCS

Printing date 03/28/2019 Version Number 4 Reviewed on 03/23/2019

* 
## 1 Identification

· **Product identifier**

· **Trade name: VOC Gas Standard (1X1 mL)**

· **Part number:** DWM-544-1
· **Application of the substance / the mixture** Reagents and Standards for Analytical Chemical Laboratory Use

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Agilent Technologies, Inc.
5301 Stevens Creek Blvd.
Santa Clara, CA 95051 USA

· **Information department:**
Telephone: 800-227-9770
e-mail: pdl-msds_author@agilent.com
· **Emergency telephone number:** CHEMTREC®: 1-800-424-9300

* 
## 2 Hazard(s) identification

· **Classification of the substance or mixture**


GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.


GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.


GHS08 Health hazard

Carc. 1A H350 May cause cancer.
STOT SE 1 H370 Causes damage to organs.

· **Label elements**
· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**


GHS02 GHS06 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**
methanol
vinyl chloride
bromomethane
· **Hazard statements**
Highly flammable liquid and vapor.

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# Safety Data Sheet
## acc. to OSHA HCS



**Trade name: VOC Gas Standard (1X1 mL)**

(Contd. of page 1)

Toxic if inhaled.
May cause cancer.
Causes damage to organs.

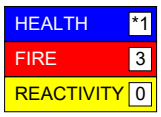
· **Precautionary statements**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see on this label).
In case of fire: Use for extinction: CO2, powder or water spray.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**




Health = 1
Fire = 3
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**




Health = *1
Fire = 3
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

* 
## 3 Composition/information on ingredients

· **Chemical characterization: Mixtures**
· **Description:** Mixture of the substances listed below with nonhazardous additions.

| · **Dangerous components:** | | |
|---|---|---|
| 67-56-1 | methanol | 98.483% |
| 74-87-3 | chloromethane | 0.253% |
| 75-01-4 | vinyl chloride | 0.253% |

(Contd. on page 3)

(Contd. of page 2)

| | | |
|---|---|---|
| 75-00-3 | chloroethane | 0.253% |

## 4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Remove breathing apparatus only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
· **After inhalation:**
Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.
· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
· **After swallowing:** If symptoms persist consult doctor.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

## 5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
· **Advice for firefighters**
· **Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
· **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
· **Protective Action Criteria for Chemicals**

| · **PAC-1:** | | |
|---|---|---|
| 67-56-1 | methanol | 530 ppm |

(Contd. on page 4)

(Contd. of page 3)

| | | |
|---|---|---|
| 74-87-3 | chloromethane | 150 ppm |
| 74-83-9 | bromomethane | 19 ppm |
| 75-01-4 | vinyl chloride | 250 ppm |
| 75-71-8 | dichlorodifluoromethane | 3,000 ppm |
| 75-69-4 | trichlorofluoromethane | 91 ppm |
| 75-00-3 | chloroethane | 300 ppm |

· **PAC-2:**

| | | |
|---|---|---|
| 67-56-1 | methanol | 2,100 ppm |
| 74-87-3 | chloromethane | 910 ppm |
| 74-83-9 | bromomethane | 210 ppm |
| 75-01-4 | vinyl chloride | 1,200 ppm |
| 75-71-8 | dichlorodifluoromethane | 10,000 ppm |
| 75-69-4 | trichlorofluoromethane | 1,000 ppm |
| 75-00-3 | chloroethane | 5100* ppm |

· **PAC-3:**

| | | |
|---|---|---|
| 67-56-1 | methanol | 7200* ppm |
| 74-87-3 | chloromethane | 3,000 ppm |
| 74-83-9 | bromomethane | 740 ppm |
| 75-01-4 | vinyl chloride | 4800* ppm |
| 75-71-8 | dichlorodifluoromethane | 50,000 ppm |
| 75-69-4 | trichlorofluoromethane | 10,000 ppm |
| 75-00-3 | chloroethane | 20000** ppm |

## 7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
· **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** Store in a cool location.
· **Information about storage in one common storage facility:** Not required.
· **Further information about storage conditions:**
Keep receptacle tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **Specific end use(s)** No further relevant information available.



(Contd. on page 5)

(Contd. of page 4)

## 8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

| · **Components with limit values that require monitoring at the workplace:** | |
|---|---|
| **67-56-1 methanol** | |
| PEL | Long-term value: 260 mg/m³, 200 ppm |
| REL | Short-term value: 325 mg/m³, 250 ppm<br>Long-term value: 260 mg/m³, 200 ppm<br>Skin |
| TLV | Short-term value: 328 mg/m³, 250 ppm<br>Long-term value: 262 mg/m³, 200 ppm<br>Skin; BEI |
| **74-87-3 chloromethane** | |
| PEL | Long-term value: 100 ppm<br>Ceiling limit value: 200; 300* ppm<br>*5-min peak in any 3 hrs |
| REL | See Pocket Guide App. A |
| TLV | Short-term value: 207 mg/m³, 100 ppm<br>Long-term value: 103 mg/m³, 50 ppm<br>Skin |
| **75-01-4 vinyl chloride** | |
| PEL | Short-term value: 5* ppm<br>Long-term value: 1 ppm<br>*Avg. not exceeding any 15 min; see 29CFR1910.1017 |
| REL | See Pocket Guide App.A |
| TLV | Long-term value: 2.6 mg/m³, 1 ppm |
| **75-00-3 chloroethane** | |
| PEL | Long-term value: 2600 mg/m³, 1000 ppm |
| REL | Handle with caution; See Pocket Guide App. C |
| TLV | Long-term value: 264 mg/m³, 100 ppm<br>Skin |

| · **Ingredients with biological limit values:** | |
|---|---|
| **67-56-1 methanol** | |
| BEI | 15 mg/L<br>Medium: urine<br>Time: end of shift<br>Parameter: Methanol (background, nonspecific) |

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.

(Contd. on page 6)

(Contd. of page 5)

Store protective clothing separately.

· **Breathing equipment:**
When used as intended with Agilent instruments, the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.
Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device/equipment with appropriate organic or acid gas cartridge.

· **Protection of hands:**
Although not recommended for constant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.

· **Material of gloves**
For normal use: nitrile rubber, 11-13 mil thickness
For direct contact with the chemical: butyl rubber, 12-15 mil thickness

· **Penetration time of glove material**
For normal use: nitrile rubber: 1 hour
For direct contact with the chemical: butyl rubber: >4 hours

· **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

| | |
|---|---|
| · **Information on basic physical and chemical properties** | |
| · **General Information** | |
| · **Appearance:** | |
| **Form:** | Fluid |
| **Color:** | Colorless |
| · **Odor:** | Alcohol-like |
| · **Odor threshold:** | Not determined. |
| · **pH-value:** | Not determined. |
| · **Change in condition** | |
| **Melting point/Melting range:** | -98 °C (-144.4 °F) |
| **Boiling point/Boiling range:** | 64.7 °C (148.5 °F) |
| · **Flash point:** | 9 °C (48.2 °F) |
| · **Flammability (solid, gaseous):** | Not applicable. |
| · **Ignition temperature:** | 455 °C (851 °F) |
| · **Decomposition temperature:** | Not determined. |
| · **Auto igniting:** | Product is not selfigniting. |
| · **Danger of explosion:** | Product is not explosive. However, formation of explosive air/vapor mixtures are possible. |

(Contd. on page 7)

(Contd. of page 6)

| | |
|---|---|
| · **Explosion limits:** | |
| **Lower:** | 5.5 Vol % |
| **Upper:** | 44 Vol % |
| · **Vapor pressure at 20 °C (68 °F):** | 100 hPa (75 mm Hg) |
| · **Density at 20 °C (68 °F):** | 0.80692 g/cm³ (6.73375 lbs/gal) |
| · **Relative density** | Not determined. |
| · **Vapor density** | Not determined. |
| · **Evaporation rate** | Not determined. |
| · **Solubility in / Miscibility with** | |
| **Water:** | Not miscible or difficult to mix. |
| · **Partition coefficient (n-octanol/water):** | Not determined. |
| · **Viscosity:** | |
| **Dynamic:** | Not determined. |
| **Kinematic:** | Not determined. |
| · **Solvent content:** | |
| **Organic solvents:** | 98.7 % |
| **VOC content:** | 98.48 %<br>794.7 g/l / 6.63 lb/gal |
| **Solids content:** | 0.0 % |
| · **Other information** | No further relevant information available. |

## 10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions** No dangerous reactions known.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** No dangerous decomposition products known.

* 

## 11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

| · **LD/LC50 values that are relevant for classification:** | | |
|---|---|---|
| **ATE (Acute Toxicity Estimate)** | | |
| Oral | LD50 | 84,652 mg/kg (rat) |
| Inhalative | LC50/4 h | 3.05 mg/L |

| **67-56-1 methanol** | | |
|---|---|---|
| Oral | LD50 | 5,628 mg/kg (rat) |
| Dermal | LD50 | 15,800 mg/kg (rabbit) |

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| 74-87-3 chloromethane | | |
|---|---|---|
| Oral | LD50 | 1,800 mg/kg (rat) |
| Inhalative | LC50/4 h | >21,800 mg/L (rat) |
| **74-83-9 bromomethane** | | |
| Oral | LD50 | 214 mg/kg (rat) |
| Inhalative | LC50/4 h | 302 mg/L (rat) |
| **75-01-4 vinyl chloride** | | |
| Oral | LD50 | 500 mg/kg (rat) |
| **75-69-4 trichlorofluoromethane** | | |
| Oral | LD50 | >15,000 mg/kg (rat) |
| **75-00-3 chloroethane** | | |
| Inhalative | LC50/4 h | >19,000 mg/L (rat) |

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic

· **Carcinogenic categories**

| · **IARC (International Agency for Research on Cancer)** | | |
|---|---|---|
| 74-87-3 | chloromethane | 3 |
| 74-83-9 | bromomethane | 3 |
| 75-01-4 | vinyl chloride | 1 |
| 75-00-3 | chloroethane | 3 |

| · **NTP (National Toxicology Program)** | | |
|---|---|---|
| 75-01-4 | vinyl chloride | K |

| · **OSHA-Ca (Occupational Safety & Health Administration)** | |
|---|---|
| 75-01-4 | vinyl chloride |

## 12 Ecological information

· **Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.

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# Safety Data Sheet
## acc. to OSHA HCS



(Contd. of page 8)

· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.

* 
## 14 Transport information

| | |
|---|---|
| · **Not Regulated, De minimus Quantities** | - |
| · **UN-Number** | |
| · **DOT, IMDG, IATA** | UN1230 |
| · **UN proper shipping name** | |
| · **DOT** | Methanol |
| · **IMDG, IATA** | METHANOL |
| · **Transport hazard class(es)** | |
| · **DOT** |  |
| · **Class** | 3 Flammable liquids |
| · **Label** | 3, 6.1 |
| · **IMDG** |  |
| · **Class** | 3 Flammable liquids |
| · **Label** | 3/6.1 |
| · **IATA** |  |
| · **Class** | 3 Flammable liquids |
| · **Label** | 3 (6.1) |
| · **Packing group** | |
| · **DOT, IMDG, IATA** | II |

(Contd. on page 10)

(Contd. of page 9)

| | |
|---|---|
| · **Environmental hazards:** | Not applicable. |
| · **Special precautions for user** | Warning: Flammable liquids |
| · **Danger code (Kemler):** | 336 |
| · **EMS Number:** | F-E,S-D |
| · **Stowage Category** | B |
| · **Stowage Code** | SW2 Clear of living quarters. |
| · **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** | Not applicable. |
| · **Transport/Additional information:** | |
| · **DOT** | |
| · **Quantity limitations** | On passenger aircraft/rail: 1 L<br>On cargo aircraft only: 60 L |
| · **IMDG** | |
| · **Limited quantities (LQ)** | 1L |
| · **Excepted quantities (EQ)** | Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml |
| · **UN "Model Regulation":** | UN 1230 METHANOL, 3 (6.1), II |

* 

## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

| · **Section 355 (extremely hazardous substances):** | |
|---|---|
| 74-83-9 | bromomethane |

| · **Section 313 (Specific toxic chemical listings):** |
|---|
| All ingredients are listed. |

| · **TSCA (Toxic Substances Control Act):** |
|---|
| All ingredients are listed. |

· **Proposition 65**

| · **Chemicals known to cause cancer:** | |
|---|---|
| 75-01-4 | vinyl chloride |
| 75-00-3 | chloroethane |

| · **Chemicals known to cause reproductive toxicity for females:** |
|---|
| None of the ingredients is listed. |

| · **Chemicals known to cause reproductive toxicity for males:** | |
|---|---|
| 74-87-3 | chloromethane |

| · **Chemicals known to cause developmental toxicity:** | |
|---|---|
| 67-56-1 | methanol |
| 74-87-3 | chloromethane |
| 74-83-9 | bromomethane |

(Contd. on page 11)

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· **Carcinogenic categories**

| · **EPA (Environmental Protection Agency)** | | |
|---|---|---|
| 74-87-3 | chloromethane | D, CBD |
| 74-83-9 | bromomethane | D |
| 75-01-4 | vinyl chloride | A, K/L |

| · **TLV (Threshold Limit Value established by ACGIH)** | | |
|---|---|---|
| 74-87-3 | chloromethane | A4 |
| 74-83-9 | bromomethane | A4 |
| 75-01-4 | vinyl chloride | A1 |
| 75-71-8 | dichlorodifluoromethane | A4 |
| 75-69-4 | trichlorofluoromethane | A4 |
| 75-00-3 | chloroethane | A3 |

| · **NIOSH-Ca (National Institute for Occupational Safety and Health)** | |
|---|---|
| 74-87-3 | chloromethane |
| 74-83-9 | bromomethane |
| 75-01-4 | vinyl chloride |

· **National regulations:**
· **Additional classification according to Decree on Hazardous Materials:**
Carcinogenic hazardous material group III (dangerous).

· **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.
Exceptions can be made by the authorities in certain cases.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation.
No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

· **Department issuing SDS:** Document Control / Regulatory
· **Contact:** regulatory@ultrasci.com
· **Date of preparation / last revision** 03/28/2019 / 3
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety

(Contd. on page 12)

# Safety Data Sheet
## acc. to OSHA HCS



**Trade name: VOC Gas Standard (1X1 mL)**

(Contd. of page 11)

OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Carc. 1A: Carcinogenicity – Category 1A
STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

· *** Data compared to the previous version altered.**

# SAFETY DATA SHEET

Version 4.9
Revision Date 08/24/2015
Print Date 02/07/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifiers

Product name : Zinc

Product Number : 324930
Brand : Aldrich
Index-No. : 030-001-00-1

CAS-No. : 7440-66-6

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

### 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052

### 1.4 Emergency telephone number

Emergency Phone # : (314) 776-6555

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Self-heating substances and mixtures (Category 1), H251
Substances and mixtures, which in contact with water, emit flammable gases (Category 1), H260
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)
H251 Self-heating: may catch fire.
H260 In contact with water releases flammable gases which may ignite spontaneously.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P223 Do not allow contact with water.
P231 + P232 Handle under inert gas. Protect from moisture.
P235 + P410 Keep cool. Protect from sunlight.
P273 Avoid release to the environment.

| | |
|---|---|
| P280 | Wear protective gloves/ eye protection/ face protection. |
| P335 + P334 | Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages. |
| P370 + P378 | In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. |
| P391 | Collect spillage. |
| P402 + P404 | Store in a dry place. Store in a closed container. |
| P407 | Maintain air gap between stacks/ pallets. |
| P413 | Store bulk masses greater than .? kg/ .? lbs at temperatures not exceeding .? °C/ .? °F. |
| P420 | Store away from other materials. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Combustible dust

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| | | |
|---|---|---|
| Formula | : | Zn |
| Molecular weight | : | 65.39 g/mol |
| CAS-No. | : | 7440-66-6 |
| EC-No. | : | 231-175-3 |
| Index-No. | : | 030-001-00-1 |

**Hazardous components**

| Component | Classification | Concentration |
|---|---|---|
| **Zinc powder (pyrophoric)** | | |
| | Self-heat. 1; Water-react. 1; Aquatic Acute 1; Aquatic Chronic 1; H251, H260, H410 | <= 100 % |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

**If inhaled**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**
Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**
Flush eyes with water as a precaution.

**If swallowed**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media**
Dry powder

**5.2 Special hazards arising from the substance or mixture**
Zinc/zinc oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
No data available

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures**
Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water. Keep in suitable, closed containers for disposal. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

**6.4 Reference to other sections**
For disposal see section 13.

## 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling**
Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.
Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No smoking.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Keep container tightly closed in a dry and well-ventilated place.
Never allow product to get in contact with water during storage.

Keep in a dry place.
Storage class (TRGS 510): Pyrophoric and self-heating hazardous materials

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1 Control parameters**

**Components with workplace control parameters**
Contains no substances with occupational exposure limit values.

**8.2 Exposure controls**

**Appropriate engineering controls**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Protective gloves against thermal risks

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection**
Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | | |
|---|---|---|
| a) | Appearance | Form: powder<br>Colour: grey |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | No data available |
| e) | Melting point/freezing point | Melting point/range: 420 °C (788 °F) - lit. |
| f) | Initial boiling point and boiling range | 907 °C (1,665 °F) - lit. |
| g) | Flash point | No data available |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | May form combustible dust concentrations in air |
| j) | Upper/lower flammability or explosive limits | No data available |
| k) | Vapour pressure | 1 hPa (1 mmHg) at 487 °C (909 °F) |

| | | |
|---|---|---|
| l) | Vapour density | No data available |
| m) | Relative density | 7.133 g/mL at 25 °C (77 °F) |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n-octanol/water | log Pow: 5 |
| p) | Auto-ignition temperature | The substance or mixture is classified as self heating with the category 1. |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**
No data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**
No data available

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
Reacts violently with water.

**10.4 Conditions to avoid**
Exposure to moisture

**10.5 Incompatible materials**
Strong acids and oxidizing agents

**10.6 Hazardous decomposition products**
Other decomposition products - No data available
In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

**11.1 Information on toxicological effects**

**Acute toxicity**
No data available

Inhalation: No data available

Dermal: No data available

No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
Did not cause sensitisation on laboratory animals.

**Germ cell mutagenicity**
No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: ZG8600000

chills, dry throat, sweet taste, Fever, Cough, Nausea, Vomiting, Weakness
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | LC50 - Cyprinus carpio (Carp) - 450.0 µg/l - 96.0 h |
| Toxicity to daphnia and other aquatic invertebrates | LC50 - Daphnia magna (Water flea) - 0.068 mg/l - 48 h |
| | mortality NOEC - Daphnia (water flea) - 0.101 - 0.14 mg/l - 7 d |

### 12.2 Persistence and degradability

### 12.3 Bioaccumulative potential

| | |
|---|---|
| Bioaccumulation | Algae - 7 d<br>at 16 °C - 5 µg/l |
| | Bioconcentration factor (BCF): 466 |

### 12.4 Mobility in soil
No data available

### 12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product**
Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

**DOT (US)**
UN number: 1436 Class: 4.3 (4.2) Packing group: II
Proper shipping name: Zinc powder
Reportable Quantity (RQ): 1000 lbs

Poison Inhalation Hazard: No

**IMDG**
UN number: 1436 Class: 4.3 (4.2) Packing group: II EMS-No: F-G, S-O
Proper shipping name: ZINC POWDER
Marine pollutant:yes

**IATA**
UN number: 1436 Class: 4.3 (4.2) Packing group: II
Proper shipping name: Zinc powder

## 15. REGULATORY INFORMATION

**SARA 302 Components**
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:

| | CAS-No. | Revision Date |
|---|---|---|
| Zinc powder (pyrophoric) | 7440-66-6 | 1993-04-24 |

**SARA 311/312 Hazards**
Reactivity Hazard

**Massachusetts Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Zinc powder (pyrophoric) | 7440-66-6 | 1993-04-24 |

**Pennsylvania Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Zinc powder (pyrophoric) | 7440-66-6 | 1993-04-24 |

**New Jersey Right To Know Components**

| | CAS-No. | Revision Date |
|---|---|---|
| Zinc powder (pyrophoric) | 7440-66-6 | 1993-04-24 |

**California Prop. 65 Components**
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16. OTHER INFORMATION

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| H251 | Self-heating: may catch fire. |
| H260 | In contact with water releases flammable gases which may ignite spontaneously. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| Self-heat. | Self-heating substances and mixtures |

**HMIS Rating**
Health hazard: 0

| | |
|---|---|
| Chronic Health Hazard: | |
| Flammability: | 3 |
| Physical Hazard | 1 |

**NFPA Rating**

| | |
|---|---|
| Health hazard: | 0 |
| Fire Hazard: | 3 |
| Reactivity Hazard: | 1 |
| Special hazard.I: | W |

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

**Preparation Information**

Sigma-Aldrich Corporation
Product Safety – Americas Region
1-800-521-8956

Version: 4.9 Revision Date: 08/24/2015 Print Date: 02/07/2016

# ATTACHMENT F

# JOBSITE SAFETY INSPECTION CHECKLIST

# Jobsite Safety Inspection Checklist

**Date:** _____ **Inspected By:** _____

**Location:** _____ **Project #:** _____

Check one of the following: **A:** Acceptable **NA**: Not Applicable **D**: Deficiency

| | A | NA | D | Remark |
|---|---|---|---|---|
| 1. HASP available onsite for inspection? | | | | |
| 2. Health & Safety Compliance agreement (in HASP) appropriately signed by Langan employees and contractors? | | | | |
| 3. Hospital route map with directions posted on site? | | | | |
| 4. Emergency Notification List posted on site? | | | | |
| 5. First Aid kit available and properly stocked? | | | | |
| 6. Personnel trained in CPR/First Aid on site? | | | | |
| 7. MSDSs readily available, and all workers knowledgeable about the specific chemicals and compounds to which they may be exposed? | | | | |
| 8 Appropriate PPE being worn by Langan employees and contractors? | | | | |
| 9. Project site safe practices ("Standing Orders") posted? | | | | |
| 10. Project staff have 40-hr./8-hr./Supervisor HAZWOPER training? | | | | |
| 11. Project staff medically cleared to work in hazardous waste sites and fit-tested to wear respirators, if needed? | | | | |
| 12. Respiratory protection readily available? | | | | |
| 13. Health & Safety Incident Report forms available? | | | | |
| 14. Air monitoring instruments calibrated daily, and results recorded on the Daily Instrument Calibration check sheet? | | | | |
| 15. Air monitoring readings recorded on the air monitoring data sheet/field logbook? | | | | |
| 16. Subcontract workers have received 40-hr./8-hr./Spvsr. HAZWOPER training, as appropriate? | | | | |
| 17. Subcontract workers medically cleared to work on site, and fit-tested for respirator wear? | | | | |
| 18. Subcontract workers have respirators readily available? | | | | |
| 19. Mark outs of underground utilities done prior to initiating any subsurface activities? | | | | |

| | | | | |
|---|---|---|---|---|
| 20. Decontamination procedures being followed as outlined in HASP? | | | | |
| 21. Are tools in good condition and properly used? | | | | |
| 22. Drilling performed in areas free from underground objects including utilities? | | | | |
| 23. Adequate size/type fire extinguisher supplied? | | | | |
| 24. Equipment at least 20 feet from overhead powerlines? | | | | |
| 25. Evidence that drilling operator is responsible for the safety of his rig. | | | | |
| 26. Trench sides shored, layer back, or boxed? | | | | |
| 27. Underground utilities located, and authorities contacted before digging? | | | | |
| 28. Ladders in trench (25-foot spacing)? | | | | |
| 29. Excavated material placed more than 2 feet away from excavation edge? | | | | |
| 30. Public protected from exposure to open excavation? | | | | |
| 31. People entering the excavation regarding it as a permit-required confined space and following appropriate procedures? | | | | |
| 32. Confined space entry permit is completed and posted? | | | | |
| 33. All persons knowledgeable about the conditions and characteristics of the confined space? | | | | |
| 34. All persons engaged in confined space operations have been trained in safe entry and rescue (non-entry)? | | | | |
| 35. Full body harnesses, lifelines, and hoisting apparatus available for rescue needs? | | | | |
| 36. Attendant and/or supervisor certified in basic first aid and CPR? | | | | |
| 37. Confined space atmosphere checked before entry and continuously while the work is going on? | | | | |
| 38. Results of confined space atmosphere testing recorded? | | | | |
| 39. Evidence of coordination with off-site rescue services to perform entry rescue, if needed? | | | | |
| 40. Are extension cords rated for this work being used and are they properly maintained? | | | | |
| 41. Are GFCIs provided and being used? | | | | |

Unsafe Acts: _____

_____

_____

_____

Notes: _____

_____

_____

_____

# ATTACHMENT G

# JOB SAFETY ANALYSIS FORM

| LANGAN | **Job Safety Analysis (JSA)**<br>**Construction Health and Safety** |
|---|---|
| **JSA TITLE:**<br><br>**JSA NUMBER:** | **DATE CREATED:**<br>**CREATED BY**:<br>**REVISION DATE:**<br>**REVISED BY:** |
| **Langan employees must review and revise the Job Safety Analysis (JSA) as needed to address the any site-specific hazards not identified. Employees must provide their signatures on the last page of the JSA indicating they have review the JSA and are aware the potential hazards associated with this work and will follow the provided preventive or corrective measures.** | |

| **PERSONAL PROTECTIVE EQUIPMENT REQUIRED: (PPE):** ■ Required ☒ As Needed | | |
|---|---|---|
| ☐ Steel-toed boots | ☐ Nitrile gloves | ☐ Dermal Protection (Specify) |
| ☐ Long-sleeved shirt | ☐ Leather/ Cut-resistant gloves | ☐ High visibility vest/clothing |
| ☐ Safety glasses | ☐ Face Shield | ☐ Hard hat |
| **ADDITIONAL PERSONAL PROTECTIVE EQUIPMENT NEEDED (Provide specific type(s) or descriptions)** | | |
| ☐ Air Monitoring: | ☐ Respirators: | ☐ Other: |
| ☐ Dermal Protection: | ☐ Cartridges: | ☐ Other: |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE OR CORRECTIVE ACTION |
|---|---|---|
| 1. | 1.<br><br>2. | 1a.<br>1b.<br>2a.<br>2b. |
| 2. | 1. | 1 |
| Additional items identified in the field. | | |
| Additional Items. | | |

**If additional items are identified during daily work activities, please notify all relevant personnel about the change and document on this JSA.**

| LANGAN | Job Safety Analysis (JSA)<br>Construction Health and Safety |
|---|---|
| **JSA Title: COVID-19 Awareness – Site Work**<br>**JSA Number: JSA046-00** |  |
| **A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.** | |

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Boots | ☐ Long Sleeves | ☐ Safety Vest (Class 2) | ☐ Hard Hat | ☐ Hearing Protection |
| ☐ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☐ Nitrile Gloves | ☐ PVC Gloves |
| ☐ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: Alcohol-based hand sanitizer, disinfectant wipes/spray | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 1. All Activities | 1. Transmittal/exposure of COVID-19 | 1. Ask yourself and your managers – is this work essential? Can this be done remotely?<br>2. Stay home if sick or showing symptoms of COVID-19 (e.g., fever, cough, etc.).<br>3. Carry nitrile gloves, alcohol-based hand sanitizer, face coverings and disinfectant wipes/spray during field work.<br>4. Check federal, state, and/or local travel restrictions **prior** to travel. Many states, counties, and cities are passing strict "shelter-in-place" or business restrictions in response to COVID-19.<br>5. Immediately notify Beverly Williams or Rory Johnston (Supervisor if employee chooses) if you display symptoms of COVID-19. Symptoms include fever (over 100.4 F), cough, and shortness of breath.<br>6. Notify Beverly Williams or Rory Johnston, Supervisor and Coronavirus Task Force if you had close contact with an individual who tested positive or displayed symptoms of COVID-19.<br>7. Do not touch your face, to the extent possible.<br>8. Wear face coverings when around other worker to minimize spread of COVID-19. (May be required in certain states or locations.) |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | | 9. Practice social distancing, maintaining at least 6 feet of distance between yourself and others. Avoid gatherings of more than 10 people. Limit, to the extent possible, contact with public items/objects.<br>10. Clean your hands frequently with soap and water for at least 20 seconds especially after you have been in a public place, or after blowing your nose, coughing, sneezing, or using the rest room.<br>11. If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.<br>12. Cover your mouth and nose with a tissue when you cough or sneeze or use the inside of your elbow.<br>13. Clean and disinfect frequently touched surfaces daily, for example, cell phones, computer equipment, headsets, tables, doorknobs, light switches, countertops, handles, desks, toilets, faucets, and sinks. |
| 2. Travel to Jobsite | 1. Transmittal/exposure of COVID-19 between passengers<br>2. Transmittal/exposure of COVID-19 from previous occupants (rental and fleet vehicles)<br>3. Transmittal/exposure of COVID-19 while refueling | 1. Limit the number of occupants to each vehicle to 2 people. Employees should sit as far away from each other as possible.<br>2. Disinfect high "hand-traffic" areas of the vehicle: Door handles, steering wheel, turn signal and control rods, dashboard controls, seatbelts, armrests, etc. To the extent possible, do not use recycled air for heat/AC and travel with the windows open.<br>3. Use hand sanitizer before and after pumping gas and only return to the inside of the vehicle after refueling is complete.<br>4. Wear nitrile gloves if available or disinfect the keypad, pump handle, and fuel grade button prior to use.<br>5. Recommend face coverings are worn to minimize spread of COVID-19. |
| 3. Conduct Tailgate Safety Meeting & Complete H&S Paperwork | 1. Transmittal/exposure of COVID-19 between meeting participants | 1. Practice social distancing, maintaining at least 6 feet of distance between yourself and others.<br>2. Recommend face coverings are worn when around other workers to minimize spread of COVID-19,<br>3. Hold meetings outside and keep in mind wind direction. To the extent possible, remain crosswind from other people.<br>4. Designate a single person to maintain sign-in sheets/permits throughout the day to limit the passing of pens/clipboards between people.<br>5. Each person should complete their own JSA, even if they are completing similar tasks as others in order to limit the passing of paper/pens/clipboards between people.<br>6. Include COVID-19 topics and prevention measures in safety meetings. |
| 4. Conduct Site Work | 1. Transmittal/exposure of COVID-19 between site workers and public. | 1. Practice social distancing maintaining 6 feet of distance between yourself and others.<br>2. Recommend face coverings are worn when around other workers to minimize spread of COVID-19,<br>3. To the extent possible, do not interact with the public. If it is necessary, politely explain you are practicing social distance and request they stay at least 6 feet away and they do not attempt to pass objects to you.<br>4. Wear nitrile gloves during site work underneath the appropriate gloves for your task. Utilize appropriate decontamination procedures, securely bag all waste (including nitrile gloves) generated during site work and dispose of. |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | | 5. Do not share tools. Each person should be equipped with the tools to complete their task or tasks should be divided to remove the need to share tools. If tools must be shared, surfaces should be disinfected.<br>6. Clean and disinfect surfaces of rental tools and equipment upon receipt. To the extent possible rent equipment from Langan's internal equipment reservation center, where cleaning/disinfecting procedures can be verified. |
| 5. Use of Construction Trailers | 1. Transmittal/exposure of COVID-19 between site workers and others. | 1. Avoid use of shared trailers, if possible. Minimize trailer use to essential personnel.<br>2. Practice social distancing; maintaining 6 feet of distance between yourself and others in trailer.<br>3. Clean and disinfect areas including desks, phones, chairs, and other common areas, before and after use. |
| 6. Purchasing Food from a Restaurant | 1. Transmittal/exposure of COVID-19 from other customers, staff, surfaces. | 1. To the extent possible, bring your own food.<br>2. If you must visit a restaurant, call ahead for take-out or "contactless delivery." Do not dine in. When picking up food, follow guidelines for Job Step #8: Purchasing Supplies at Retail/Shipping Centers.<br>3. Wash hands before and after eating. |
| 7. Smoking Cigarettes | 1. Transmittal/exposure of COVID-19 by touching mouth with hands | 1. Cigarette smokers are at greater risk of complications arising from COVID-19. Nicotine patches/lozenges/gum, smoking cessation programs, and prescription medications may aid in "kicking the habit" if you decide to quit.<br>2. Wash hands thoroughly before and after smoking.<br>3. Discard cigarette butts properly. Do not light cigarettes from others and do not give cigarettes to others. |
| 8. Hotel Stay | 1. Transmittal/exposure of COVID-19 from previous occupants, hotel staff, common areas. | 1. Verify the hotel chain/brand has modified cleaning procedures to reflect risk of COVID-19. Most hotel companies have issued statements on their websites and in email blasts reflecting these new procedures.<br>2. Use the front door, and not peripheral entrances. Front doors of hotels are usually automatic.<br>3. Request ground floor room to avoid elevator use and a room that has not be utilized in 48-72 hours.<br>4. If elevator use is required, do not directly touch elevator buttons with your hands. Do not ride elevators with other people, to the extent possible.<br>5. Bring disinfecting wipes or sanitizing spray. Upon arrival, disinfect high "hand-traffic" areas of the hotel room: Door handles, light switches, shower/sink faucet handles, TV remote, curtain/blind handles. Clean these surfaces daily.<br>6. Place the "Do Not Disturb" Sign on your door to prevent people (housekeeping) from entering your room.<br>7. Avoid common spaces and hotel sponsored events where crowds will be present.<br>8. Confirm hotel cleaning procedures have been modified to address COVID-19. Confirm no COVID-19 cases have occurred in hotel |
| 9. Purchasing Supplies at Retail/Shipping Centers | 1. Transmittal/exposure of COVID-19 from other customers, staff, surfaces. | 1. Plan your travel to limit the need to visit retail/shipping centers.<br>2. Practice social distancing, maintaining at least 6 feet of distance between yourself and others. If the store is too crowded/small, consider visiting another store or returning at a different time.<br>3. Avoid high "hand-traffic" items/areas like door handles (i.e. use your shoulder, hip/butt, or open with a disposable napkin/paper towel), credit cards terminals (i.e. use Apple/Android pay if available), shopping carts/baskets (i.e. bring your own shopping |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | | bags), counter tops (i.e. ask clerk if you can hold the items while they are scanned) and bulk/buffet items (i.e. just avoid them).<br>4. Disinfect your hands before and after visiting a retail/shipping center. |

| Print Name | Sign Name | Date |
|---|---|---|
| ***Prepared by:*** | | |
| | | |
| | | |
| | | |
| ***Reviewed by:*** | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| LANGAN | Job Safety Analysis (JSA)<br>Construction Health and Safety |
|---|---|
| **JSA Title:** Environmental Sampling<br>**JSA Number:** JSA021-01<br>**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.** |  <br>**S** – ***Stop,*** *what has changed?*<br>**T** – ***Think*** *about the task*<br>**E** – ***Evaluate*** *potential hazards*<br>**P** – ***Plan*** *safe approach*<br>**S** - ***Start*** *task / **Stop** & regroup* |

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☐ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☐ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☒ Fire Resistant Clothing | ☐ Rubber Boots |
| ☒ Insect/Animal Repellent | ☒ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: Tyvek Sleeves | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 1. Drive to sample location | 1. Rough/Off Road terrain | 1. Pay attention to road conditions such as road erosion, unprotected embankments, and soft road conditions. |
| 2. Sample Collection (Walking) | 1. Slip/Trips/Falls<br>2. Back strains<br>3. Wildlife (Insects, Stray animals, rodents)<br>4. Poisonous vegetation | 1. Minimize distance to sample area/ Plan route and check surface prior to carrying heavy equipment/ Locate safest access point/ Follow good housekeeping procedures/ Mark significant below grade hazards (holes, trenches) with spray paint or cones/ Wear foot protection with ankle support and gripping soles.<br>2. Use proper lifting techniques/ Use wheeled transport/ Obtain assistance where and when needed/ Consider load weight when evaluating what is safe and unsafe to carry.<br>3. Be aware of surroundings for the presence of wildlife. Do not approach stray animals. Carry and use animal repellant when needed/ Use bug spray when needed.<br>4. Keep skin covered/ Identify and avoid poisonous vegetation/ Clean areas after contact with suspected vegetation. |
| 3. Sample Collection (Water) | 1. Drowning Hazards<br>2. Chemical burns (when adding acid preservative to sample)<br>3. Back Strains<br>4. Ergonomic issues<br>5. Slip/Trips/Falls | 1. Use buddy system/ Wear flotation vest if water is deeper than 2 feet or swift moving/ Select working area with stable footing. Do not attempt to cross or stand in swift moving water.<br>2. Wear proper PPE (Nitrile gloves, Tyvek Sleeves)<br>3. Use proper lifting techniques/ Use wheeled transport/ Obtain assistance where and when needed/ Consider load weight when evaluating what is safe or unsafe to carry.<br>4. When possible, avoid bending over for long periods of time/ Use a small stool for sitting or knee pad for kneeling. |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | | 5. Minimize distance to sample area/ Plan route and check surface prior to carrying heavy equipment/ Locate safest access point/ Follow good housekeeping procedures/ Mark significant below grade hazards (holes, trenches) with spray paint or cones/ Wear foot protection with ankle support and gripping soles/ Avoid standing water or slippery terrain. |
| 4. All activities | 1. Slips/ Trips/ Falls<br>2. Hand injuries, cuts, or lacerations during manual handling of materials<br>3. Foot injuries<br>4. Back injuries<br>5. Traffic<br>6. Wildlife: Stray dogs, Mice/rats, Vectors (i.e., mosquitoes, bees, etc.)<br>7. High Noise levels<br>8. Overhead hazards<br>9. Heat Stress/ Cold Stress<br>10. Eye Injuries | 1. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards<br>2. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves<br>3. Wear Langan approved safety shoes<br>4. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible<br>5. Wear high visibility clothing & vest / Use cones or signs to designate work area<br>6. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed<br>7. Wear hearing protection<br>8. Wear hard hat / Avoid areas where overhead hazards exist.<br>9. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress<br>10. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

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# LANGAN

**Job Safety Analysis (JSA)**
**Construction Health and Safety**

**JSA Title:** **Subsurface Investigation**
**JSA Number:** **JSA030-01**

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.**




| PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed): | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☒ Safety Goggles | ☐ Face Shield | ☐ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☒ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: Dielectric Overshoes, Sun Block | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 5. Transport equipment to work area | 2. Back/strain<br>3. Slip/Trip/Falls<br>4. Traffic<br>5. Cuts/abrasions/contusions from equipment<br>6. Accidents due to vehicle operations | 1. Use proper lifting techniques/Use wheeled transport<br>2. Minimize distance to work area/unobstructed path to work area/follow good housekeeping procedures<br>3. Wear proper PPE (high visibility vest or clothing)<br>4. Wear proper PPE (leather gloves, long sleeves, Langan approved safety shoes)<br>5. Observe posted speed limits/ Wear seat belts at all times |
| 6. Traffic | 1. Hit by moving vehicle | 1. Use traffic cones and signage/ Use High visibility traffic vests and clothing/ Caution tape when working near active roadways. |
| 7. Field Work (drilling, resistivity testing, and inspection) | 1. Biological Hazards: insects, rats, snakes, poisonous plants, and other animals<br>2. Heat stress/injuries<br>3. Cold Stress/injuries<br>4. High Energy Transmission Lines<br>5. Underground Utilities<br>6. Electrical (soil resistivity testing) | 1. Inspect work area to identify biological hazards. Wear light colored long sleeve shirt and long pants/ Use insect repellant as necessary/ Beware of tall grass, bushes, woods, and other areas where ticks may live/ Avoid leaving garbage on site to prevent attracting animals/ Identify and avoid contact with poisonous plants/Beware of rats, snakes, or stray animals.<br>2. Wear proper clothing (light colored)/ drink plenty of water/ take regular breaks/use sun block.<br>3. Wear proper clothing/ dress in layers/ take regular breaks.<br>4. Avoid direct contact with high energy transmission lines/ position equipment at least 15 feet or as required by PSE&G from the transmission lines/ wear proper PPE (dielectric overshoes 15 kV minimum rating). |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | | 5. Call one-call service before performing intrusive field work/ Review utility mark-outs and available utility drawings (with respect to proposed work locations)/ Follow Underground Utility Guidelines<br>6. See AGI Sting R1 operating manual for specific concerns during operating instrument |
| 8. All activities | 1. Slips/ Trips/ Falls<br>2. Hand injuries, cuts, or lacerations during manual handling of materials<br>3. Foot injuries<br>4. Back injuries<br>5. Traffic<br>6. Wildlife: Stray dogs, Mice/rats, Vectors (i.e., mosquitoes, bees, etc.)<br>7. High Noise levels<br>8. Overhead hazards<br>9. Heat Stress/ Cold Stress<br>10. Eye Injuries | 7. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards.<br>8. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves.<br>9. Wear Langan approved safety shoes.<br>10. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible.<br>11. Wear high visibility clothing & vest / Use cones or signs to designate work area.<br>12. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed.<br>13. Wear proper hearing protection.<br>14. Wear hard hat / Avoid areas where overhead hazards exist.<br>15. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress.<br>16. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

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| LANGAN | Job Safety Analysis (JSA)<br>Construction Health and Safety |
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| **JSA Title:** Field Sampling<br>**JSA Number:** JSA022-01<br>**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.** |  <br>S – *Stop,* what has changed?<br>T – *Think* about the task<br>E – *Evaluate* potential hazards<br>P – *Plan* safe approach<br>S - *Start* task / *Stop* & regroup |

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☐ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☒ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☐ Other: | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 9. Unpack/Transport equipment to work area. | 7. Back Strains<br>8. Slip/Trips/Falls<br>9. Cuts/Abrasions from equipment<br>10. Contusions from dropped equipment | 6. Use proper lifting techniques/Use wheeled transport.<br>7. Minimize distance to work area/Unobstructed path to work area/follow good housekeeping procedures. Mark slip/trip/fall hazards with orange safety cones.<br>8. Wear proper PPE (leather gloves, long sleeves).<br>9. Wear proper PPE (Langan approved safety shoes). |
| 10. Initial Site Arrival-Site Assessment | 5. Traffic | 5. Situational awareness (be alert of your surroundings). Secure area from through traffic. |
| 11. Surface Water Sampling | 6. Contaminated media. Skin/eye contact with biological agents and/or chemicals. | 6. Wear appropriate PPE (Safety glasses, appropriate gloves). Review (M)SDS for all chemicals being. |
| 12. Sampling from bridges | 1. Struck by vehicles | 1. Wear appropriate PPE (Safety Vest). Use buddy system and orange safety cones. |
| 13. Icing of Samples/ Transporting coolers/equipment from work area. | 11. Back Strains<br>12. Slips/Trips/Falls<br>13. Cuts/Abrasions from equipment<br>14. Pinch/Crushing Hazards. | 17. Drain coolers of water. Use proper lifting techniques. Use wheeled transport.<br>18. Have unobstructed path from work area. Aware of surroundings.<br>19. Wear proper PPE (Leather gloves, long sleeves)<br>20. Wear proper PPE (Leather gloves, long sleeves) |
| 14. Site Departure | 1. Contaminated PPE/Vehicle | 1. Contaminated PPE should be disposed of on-site. Remove boots and soiled clothing for secure storage in trunk. Wash hands promptly. |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 15. All activities | 1. Slips/ Trips/ Falls<br>2. Hand injuries, cuts, or lacerations during manual handling of materials<br>3. Foot injuries<br>4. Back injuries<br>15. Traffic<br>16. Wildlife: Stray dogs, Mice/rats, Vectors (i.e., mosquitoes, bees, etc.)<br>17. High Noise levels<br>18. Overhead hazards<br>19. Heat Stress/ Cold Stress<br>20. Eye Injuries | 1. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards<br>2. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves<br>3. Wear Langan approved safety shoes<br>4. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible<br>21. Wear high visibility clothing & vest / Use cones or signs to designate work area.<br>22. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed.<br>23. Wear hearing protection<br>24. Wear hard hat / Avoid areas where overhead hazards exist.<br>25. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress.<br>26. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

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| LANGAN | Job Safety Analysis (JSA)<br>Construction Health and Safety |
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| **JSA Title:** Equipment Transportation and Set-up<br>**JSA Number:** JSA012-01 |  <br>**S** – ***Stop,*** *what has changed?*<br>**T** – ***Think*** *about the task*<br>**E** – ***Evaluate*** *potential hazards*<br>**P** – ***Plan*** *safe approach*<br>**S** - ***Start*** *task /* ***Stop*** *& regroup* |
| **A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.** | |

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☐ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☐ Other: | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 16. Transport equipment to work area | 11. Back Strain<br>12. Slips/ Trips/ Falls<br>13. Traffic<br>14. Cuts/abrasions from equipment<br>15. Contusions from dropped equipment | 1. Use proper lifting techniques / Use wheeled transport.<br>2. Minimize distance to work area / Have unobstructed path to work area / Follow good housekeeping procedures.<br>3. Wear proper PPE (high visibility vest or clothing)<br>4. Wear proper PPE (leather gloves, long sleeves)<br>5. Wear proper PPE (safety shoes) |
| 17. Moving equipment to its planned location | 6. Pinch Hazard<br>7. Slips/ Trips/ Falls | 1. Wear proper PPE (leather gloves)<br>2. Be aware of potential trip hazards / Practice good housekeeping procedures / Mark significant below-grade hazards (i.e., holes, trenches) with safety cones or spray paint |
| 18. Equipment Set-up | 7. Pinch Hazard<br>8. Cuts/abrasions to knuckles/hands.<br>9. Back Strain | 1. Wear proper PPE (leather gloves)<br>2. Wear proper PPE (leather gloves)<br>3. Use proper lifting techniques / Use wheeled transport |
| 19. All activities | 21. Slips/ Trips/ Falls<br>22. Hand injuries, cuts, or lacerations during manual handling of materials<br>23. Foot injuries<br>24. Back injuries<br>25. Traffic<br>26. Wildlife: Stray dogs, Mice/rats, Vectors (i.e., mosquitoes, bees, etc.) | 27. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards.<br>28. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves.<br>29. Wear Langan approved safety shoes. |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 4. All activities (cont'd) | 27. High Noise levels<br>28. Overhead hazards<br>29. Heat Stress/ Cold Stress<br>30. Eye Injuries | 30. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible.<br>31. Wear high visibility clothing & vest / Use cones or signs to designate work area.<br>32. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed.<br>33. Wear hearing protection<br>34. Wear hard hat / Avoid areas where overhead hazards exist.<br>35. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress.<br>36. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

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# LANGAN

**Job Safety Analysis (JSA)**
**Construction Health and Safety**

**JSA Title:** 55-gallon Drum Sampling
**JSA Number:** JSA043-01

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.**




S – *Stop, what has changed?*
T – *Think about the task*
E – *Evaluate potential hazards*
P – *Plan safe approach*
S - *Start task / Stop & regroup*

| PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed): | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☐ Hearing Protection |
| ☒ Safety Glasses | ☒ Safety Goggles | ☒ Face Shield | ☒ Nitrile Gloves | ☒ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: All Drums are required to be labeled. Langan employees do not open or move undocumented drums or unlabeled drums without proper project manager authorization. | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 20. Unpack/Transport equipment to work area. | 16. Back Strains<br>17. Slip/Trips/Falls<br>18. Cuts/Abrasions from equipment<br>4. Contusions from dropped equipment | 10. Use proper lifting techniques/Use wheeled transport.<br>11. Minimize distance to work area/Unobstructed path to work area/follow good housekeeping procedures. Mark slip/trip/fall hazards with orange safety cones.<br>12. Wear proper PPE (leather gloves, long sleeves).<br>4. Wear proper PPE (Langan approved safety shoes). |
| 21. Open Drums | 1. Hand Injuries, cuts or lacerations when untightening drum locking bolt, removing drum lid strap, or removing lid.<br>2. Pressure from drums. | 1. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves. Use non-metallic mallet and non-sparking tools/wrenches.<br>2. Open drum slowly to relieve pressure. Wear proper PPE: face shield and goggles; correct gloves; and over garments. |
| 22. Collecting Soil/Fluid Sample | 8. Irritation to eye from vapor, soil dust, or splashing.<br>9. Irritation to exposed skin | 6. Wear proper eye protection including safety glasses/ face shield/googles and when necessary, splash guard. If dust or vapor phase is present, wear appropriate safety breathing gear (1/2 mask or full face mask with correct filter)<br>7. Wear proper skin protection including nitrile gloves. |
| 23. Closing Drums | 1. Hand Injuries, cuts or lacerations when untightening drum locking bolt, removing drum lid strap, or removing lid. | 7. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves. Use non-metallic mallet and non-sparking tools/wrenches. |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 24. Moving Drums | 2. Hand Injuries, cuts or lacerations when untightening drum locking bolt, removing drum lid strap, or removing lid.<br>3. Back Strains | 2. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves. Use non-metallic mallet and non-sparking tools/wrenches.<br>3. Use proper lifting techniques/Use wheeled transport. |
| 25. All activities | 31. Slips/ Trips/ Falls<br>32. Hand injuries, cuts, or lacerations during manual handling of materials<br>33. Foot injuries<br>34. Back injuries<br>35. Traffic<br>36. Wildlife: Stray dogs, Mice/rats, Vectors (i.e., mosquitoes, bees, etc.)<br>37. High Noise levels<br>38. Overhead hazards<br>39. Heat Stress/ Cold Stress<br>40. Eye Injuries | 37. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards.<br>38. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves.<br>39. Wear Langan approved safety shoes.<br>40. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible.<br>41. Wear high visibility clothing & vest / Use cones or signs to designate work area.<br>42. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed.<br>43. Wear hearing protection<br>44. Wear hard hat / Avoid areas where overhead hazards exist.<br>45. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress.<br>46. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

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# LANGAN

**Job Safety Analysis (JSA)**
**Construction Health and Safety**

**JSA Title:** Direct-Push Soil Borings
**JSA Number:** JSA004-01

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.**




S – ***Stop,*** *what has changed?*
T – ***Think*** *about the task*
E – ***Evaluate*** *potential hazards*
P – ***Plan*** *safe approach*
S - ***Start*** *task /* ***Stop*** *& regroup*

| PERSONAL PROTECTIVE EQUIPMENT REQUIRED: | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☒ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: Half-face respirator, dust cartridges, PID (if applicable) | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 26. Move equipment to work site | 19. Back strain when lifting equipment.<br>20. Slips/ Trips/ Falls while moving equipment.<br>21. Traffic (if applicable)<br>22. Pinched fingers or running over toes during GeoProbe set-up.<br>23. Overturn drilling rig while transporting to loading dock on flat-bed tow truck | 13. Use proper lifting technique (use legs for bending and lifting and not the back)/ Use wheeled transport for heavy equipment / Get assistance when handling loads greater than 50 lbs. / Minimize distance to vehicle<br>14. Use proper lifting technique (use legs for bending and lifting and not the back) / Use wheeled transport for heavy equipment / Get assistance when handling loads greater than 50 lbs. / Minimize distance to vehicle / Have unobstructed path to vehicle or collection point / Do not lift/walk with boxes that are heavy/difficult to lift<br>15. Wear high visibility safety vests or clothing / Exercise caution<br>16. Wear proper PPE (cut-resistant gloves) / Stay alert, be aware of geoprobe rig at all times<br>17. Drill rig should be parked in center of flat-bed tow truck / Emergency brake shall be used at all times during transport on the flat-bed truck/ All unnecessary personnel should stay away from the flat-bed truck during moving activities |
| 27. Calibration of monitoring equipment | 10. Skin or eye contact with calibration chemicals<br>11. Pinch fingers in monitoring equipment | 8. Wear proper PPE (safety glasses/ goggles)<br>9. Wear proper PPE (leather gloves) |
| 28. Set-up GeoProbe rig | 10. Geoprobe rig movement | 8. All field personnel should stay clear of the GeoProbe rig while moving / Use a spotter when backing up the GeoProbe |
| 29. Advance GeoProbe rods below ground surface to desired depth | 4. Underground utilities<br>5. High noise levels | 4. Clean all subsurface soil borings to a minimum of 5 feet below grade.<br>5. Wear proper PPE (hearing protection) |
| 30. Remove and open acetate liner. | 41. Pinched fingers while removing macrocore. | 1. Wear proper PPE (nitrile gloves, cut-resistant or leather gloves<br>2. Wear proper PPE (cut-resistant or leather gloves) |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 5. Remove and open acetate liner (cont'd) | 42. Cuts/lacerations when cutting acetate liner open.<br>43. Exposure to hazardous vapors<br>44. Skin contacts with contaminated soil | 3. Do not place face over acetate liner when opening / Monitor hazardous vapors in air with PID / Upgrade PPE as necessary based on levels contained in the Construction Health and Safety Plan<br>4. Wear proper PPE (nitrile gloves) |
| 31. Sample Collections<br>a) Monitor parameters.<br>b) Prepare sample containers and labels | 1. Contact with potentially contaminated soil.<br>2. Lacerations from broken sample bottles<br>3. Back strain while transporting full coolers.<br>4. Internal exposure to contaminants and metals through inhalation of dust<br>5. Slips/ Trips/ Falls | 1. Use monitoring devices / Wear proper PPE (safety glasses, nitrile gloves)<br>2. Do not over-tighten bottle caps / Handle bottles safely to prevent breakage.<br>6. Use proper lifting techniques / Do not lift heavy loads without assistance.<br>7. Avoid creating dust / If necessary, wear a half mask respirator with applicable dust cartridge / Inspect respirator for damage and cleanliness prior to use / Clean respirator after each use and store in a clean, secure location.<br>8. Be alert / Follow good housekeeping procedures |
| 32. Remove excess soil from acetate liner and place in 55-gallon drum (IF NOT PERFORMED BY LANGAN, REMOVE!) | 1. Cuts/lacerations from acetate liner<br>2. Pinched fingers/hand while opening/closing drum.<br>3. Skin contacts with contaminated soil<br>4. Soil debris in eyes | 1. Wear proper PPE (cut-resistant or leather gloves)<br>2. Wear proper PPE (cut-resistant or leather gloves)<br>3. Wear proper PPE (nitrile gloves)<br>4. Wear proper PPE (safety glasses) |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 8. Transport drums to central staging location (IF NOT PERFORMED BY LANGAN, REMOVE!) | 1. Back, arm or shoulder strain from moving drums.<br>2. Pinch fingers/hand in drum cart when moving drums.<br>3. Pinch fingers/hand when operating lift-gate on vehicle.<br>4. Contact with potentially contaminated groundwater when moving improperly sealed drums.<br>5. Slips when moving drums.<br>6. Drop drum on feet/toes | 47. Use drum cart for moving drums / Use proper lifting techniques / Do not lift heavy loads without assistance.<br>48. Wear proper PPE (cut-resistant or leather gloves)<br>49. Wear proper PPE (cut-resistant or leather gloves)<br>50. Wear proper PPE (nitrile gloves underneath work gloves)<br>51. Follow good housekeeping procedures / Ensure route to move drum and storage space is free from obstructions.<br>52. Wear proper PPE (safety shoes) / Work in a safe manner to prevent dropped drum |
| 9. All activities<br><br>9. All activities (cont'd) | 1. Slips/ Trips/ Falls<br>2. Hand injuries, cuts, or lacerations during manual handling of materials<br>3. Foot injuries<br>4. Back injuries<br>5. Traffic<br>6. Wildlife: Stray dogs, Mice/rats, Vectors (i.e., mosquitoes, bees, etc.)<br>7. High Noise levels<br>8. Overhead hazards<br>9. Heat Stress/ Cold Stress<br>10. Eye Injuries | 1. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards.<br>2. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves.<br>3. Wear Langan approved safety shoes.<br>4. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible.<br>5. Wear high visibility clothing & vest / Use cones or signs to designate work area.<br>6. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed.<br>7. Wear hearing protection<br>8. Wear hard hat / Avoid areas where overhead hazards exist.<br>9. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress.<br>10. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

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| LANGAN | Job Safety Analysis (JSA)<br>Construction Health and Safety |
|---|---|
| **JSA Title:** Geophysical Investigation<br>**JSA Number:** JSA023-01 |  <br>**S** – ***Stop,*** *what has changed?*<br>**T** – ***Think*** *about the task*<br>**E** – ***Evaluate*** *potential hazards*<br>**P** – ***Plan*** *safe approach*<br>**S** - ***Start*** *task /* ***Stop*** *& regroup* |
| **A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.** | |

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☒ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☐ Other: | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 33. Transport equipment to work area | 24. Back/strain<br>25. Slip/Trip/Falls<br>26. Traffic<br>27. Cuts/abrasions/contusions from equipment | 18. Use proper lifting techniques/Use wheeled transport<br>19. Minimize distance to work area/unobstructed path to work area/follow good housekeeping procedures<br>20. Wear proper PPE (high visibility vest or clothing)<br>21. Wear proper PPE (leather gloves, long sleeves, Langan approved safety shoes) |
| 34. Supervision of subcontractor and all other activities | 12. Slip/Trips/Falls<br>13. Hand injuries<br>14. Foot injuries<br>15. Back injuries/Strains<br>16. Traffic<br>17. Wildlife<br>a. Wildlife<br>b. Mice/rats<br>c. Vectors (i.e., mosquitoes, bees, etc.)<br><br>7. Heat/Cold Stress | 10. Be aware of potential trip hazards/follow good housekeeping procedures/mark significant below-grade hazards (i.e., holes, trenches, wires, ropes) with safety cones or spray paint.<br>11. Wear proper PPE (leather gloves)/watch wear you place your hands/inspect material or equipment for jagged, rough, or slippery surfaces/ watch for pinch points/ wipe off slippery, wet, or dirty items prior to handling.<br>12. Wear proper PPE (Langan approved safety shoes)/ Be aware of uneven terrain)<br>13. Use proper lifting techniques/ Buddy system when lifting/ use wheeled transport.<br>14. Wear proper PPE (high-visibility shirts and vests)/ use cones if appropriate/ notify equipment operators of work area.<br>15. Be aware of surroundings at all times for the presence of wildlife.<br>a. Do not approach stray animals.<br>b. Carry animal repellant/ use if situation arises.<br>c. Use bug spray when needed.<br>7. Wear proper attire for weather conditions (sunscreen, protective clothing in |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | | sunlight or layer clothing in cold weather)/ drink plenty of fluids/ take regular breaks. |
| 35. All activities | 45. Slips/ Trips/ Falls<br>46. Hand injuries, cuts, or lacerations during manual handling of materials<br>47. Foot injuries<br>48. Back injuries<br>49. Traffic<br>50. Wildlife: Stray dogs, Mice/rats, Vectors (i.e., mosquitoes, bees, etc.)<br>51. High Noise levels<br>52. Overhead hazards<br>53. Heat Stress/ Cold Stress<br>54. Eye Injuries | 53. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards.<br>54. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves.<br>55. Wear Langan approved safety shoes.<br>56. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible.<br>57. Wear high visibility clothing & vest / Use cones or signs to designate work area.<br>58. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed.<br>59. Wear proper hearing protection.<br>60. Wear hard hat / Avoid areas where overhead hazards exist.<br>61. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress.<br>62. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

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# LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title:** **Ladder Use**
**JSA Number:** **JSA056**

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last Minute Risk Assessment.**




**S** – ***Stop,*** *what has changed?*
**T** – ***Think*** *about the task*
**E** – ***Evaluate*** *potential hazards*
**P** – ***Plan*** *safe approach*
**S** - ***Start*** *task /* ***Stop*** *& regroup*

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☐ Long Sleeves | ☐ Safety Vest (Class 2) | ☐ Hard Hat | ☐ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☐ Nitrile Gloves | ☐ PVC Gloves |
| ☐ Leather Gloves | ☐ Cut Resist. Gloves | ☒ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☐ Other: | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 36. Use of Ladders and Inspection of Ladders Before Use | 1. Ladders (portable, fixed)<br>2. Rolling or pinching objects<br>3. Sharp objects | 22. Inspect all ladders for structural defects prior to each use. Decals, weight restrictions, non painted surfaces.<br>23. Use the correct type and size of ladder to safely work.<br>24. . Do not use metal or wooden ladders |
| 37. Use of Ladder(s) | 18. Ladders (portable, fixed)<br>19.Elevated work platform or stairs<br>20.Slippery surfaces (water, ice, snow)<br>21.Rolling or pinching objects<br>22.Sharp objects<br>23.Poor Housekeeping<br>24.Repetitive motion or other ergonomic concerns<br>25.Airborne dust | 16. Maintain three points of contact when ascending and descending ladders.<br>17. Insure area at bottom of ladder is free of obstructions and tripping hazards.<br>18. Never carry tools in your hands while ascending or descending a ladder.<br>19. Utilize rope buckets to pull tools up to you or tool belts. Extension ladders will extend up to 36 inches above the landing that is being accessed and be tied off and secured to prevent them from moving or falling.<br>20. A spotter must hold the ladder if the employee needs to climb the ladder to tie the ladder off. When using an extension ladder, for every 4' of rise, the base must come out 1' (4 to 1 ratio) |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | | 21. If working from a ladder 6 ft. or higher, fall protection is required. Fall protection is not required for climbing ladders less than 20 ft. in height.<br>22. Use the proper ladder for the job at all times.<br>23. The belt buckle may never extend past either rail on the side of the ladder.<br>24. Do not climb higher than the second tread from the top on a stepladder or the third rung<br>25. Before ascending or descending a ladder, wait until other workers have completely cleared the ladder. Do not stand directly below a person who is climbing or descending a ladder to avoid falling objects. |
| 38. All activities | 55. Slips/ Trips/ Falls<br>56. Hand injuries, cuts or lacerations during manual handling of materials<br>57. Foot injuries<br>58. Back injuries<br>59. Eye Injuries | 63. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards<br>64. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery or dirty objects before handling / Wear leather/ cut-resistant gloves<br>65. Wear proper PPE (Langan approved safety shoes)<br>66. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible<br>67. Wear high visibility clothing & vest / Use cones or signs to designate work area<br>68. Wear hard hat / Avoid areas were overhead hazards exist.<br>69. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress<br>70. Wear safety glasses |

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# LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title: Soil Sampling from Excavator Bucket**
**JSA Number: JSA057**

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last Minute Risk Assessment.**




**S – *Stop*, what has changed?**
**T – *Think* about the task**
**E – *Evaluate* potential hazards**
**P – *Plan* safe approach**
**S - *Start* task / *Stop* & regroup**

| PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed): | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☐ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☐ Hearing Protection |
| ☒ Safety Glasses | ☒ Safety Goggles | ☐ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☐ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☒ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☐ Other: | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 39. Drive to site and/or sample location. | 28. Rough/Off-Road terrain;<br>29. Low-light or other hazardous environmental conditions. | 1. Pay attention to road conditions such as road erosion, unprotected embankments, and soft road conditions;<br>2. Ensure vehicle is properly equipped and outfitted for the terrain and all environmental conditions. |
| 40. Initial Site Arrival Site Assessment. | 1. Unsafe driving conditions including personnel walking within driving areas, open excavation or pits, steep slopes etc.;<br>2. Biological hazards (snakes, poison oak, bees). | 1. Maintain situational awareness upon arriving to the work site (be alert of your surroundings). Secure the work area from through traffic. |
| 41. Unpack and transport equipment to work area. | 1. Back Strains;<br>2. Slip/Trips/Falls;<br>3. Cuts/Abrasions from equipment;<br>4. Contusions from dropped equipment. | 1. Use proper lifting techniques and use wheeled transport;<br>2. Minimize distance to work area and create unobstructed path to work area. Follow good housekeeping procedures. Mark slip/trip/fall hazards with orange safety cones and/or caution tape;<br>3. Wear proper PPE (gloves, long sleeves, etc.);<br>4. Wear proper PPE (Langan-approved safety shoes, hardhat, etc.). |
| 42. Earth Moving Equipment. | 1. Equipment striking, crushing, running over employee etc. | 1. Place traffic cones and use caution tape to clearly delineate the excavators front and rear swing radius. Do not enter the excavators or other heavy equipment swing radius/travel paths while in operation;<br>2. Ensure all employees working in the vicinity of the excavator/heavy equipment maintain direct line of sight with the operator at all times; don't walk behind equipment or within the operators blind spots; maintain a safe distance away from the equipment; |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | | 3. Designate one employee as the “spotter” to communicate with the excavator operator, and establish a shut-down signal that, when sounded, instructs the excavator operator to freeze/stop all movement of the equipment;<br>4. Direct operator to completely power down the excavator before approaching (i.e. breaking the swing radius plane) the excavator bucket to collect a sample;<br>5. Direct the operator keep the equipment completely powered-down until all employees are at a safe distance, and it is safe to continue work. The designated spotter should be the only person directing the operator to power the equipment back on.<br>6. Conduct a planned pause anytime there is a change in procedure or before beginning a new task;<br>7. Wear proper PPE (high vis vest/clothing). |
| 43. Icing of Samples & Transporting coolers/equipment from work area. | 1. Back Strains<br>2. Slips/Trips/Falls<br>3. Cuts/Abrasions from equipment<br>4. Pinch/Crushing Hazards. | 1. Drain coolers of water. Use proper lifting techniques. Use wheeled transport whenever possible;<br>2. Plan for and utilize a safe and unobstructed path of travel to and from work area. Maintain situational awareness when traveling to and from work area;<br>3. Wear proper PPE (Leather gloves, long sleeves);<br>4. Wear proper PPE (Leather gloves, long sleeves, hard hat, Langan approved safety shoes). |
| 44. Excavated soil. | 1. Hazardous substances. | 1. Use proper equipment to monitor excavated soil for contaminates;<br>2. Ensure levels do not exceed PEL’s for contaminates;<br>3. Wear proper PPE. |
| 45. Changing site conditions. | 1. Stockpiles and/or excavations/trenches/pits creating unsafe paths of travel.<br>2. Unforeseen conditions | 1. Take time to plan out stockpile, excavation, trench, and/or test pit locations, ensuring that the planned work will not create unsafe conditions or paths of travel once performed;<br>2. Maintain situational awareness throughout the work day (be alert of the evolving site conditions);<br>3. If stockpile, excavation, trench, and/or test pit locations create pinch points, site constraints, or unsafe paths of travel or other unsafe site conditions, stop work immediately and direct the excavator operator to correct the unsafe conditions by moving stockpiles, backfilling excavations, trenches, and/or test pits etc.;<br>4. Use stop work and conduct a planned pause to address changed site conditions. |
| 46. All activities. | 1. Slips/ Trips/ Falls;<br>2. Hand injuries, cuts or lacerations during manual handling of materials;<br>3. Foot injuries;<br>4. Back injuries;<br>5. Traffic;<br>6. Wildlife: Stray dogs, Mice/rats, Vectors (i.e. mosquitoes, bees, etc.);<br>7. High Noise levels;<br>8. Overhead hazards; | 1. Be aware of potential trip hazards. Follow good housekeeping procedures. Mark significant hazards;<br>2. Inspect for jagged/sharp edges, and rough or slippery surfaces. Keep fingers away from pinch points. Wipe off greasy, wet, slippery or dirty objects before handling. Wear proper PPE (leather/ cut-resistant gloves);<br>3. Wear proper PPE (Langan approved safety shoes);<br>4. Use proper lifting techniques. Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift. Obtain assistance when possible; |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | 9. Heat Stress/ Cold Stress;<br>10. Eye Injuries. | 5. Wear high visibility clothing & vest / Use cones or signs to designate work area;<br>6. Be aware of surroundings at all times, including the presence of wildlife. Do not approach stray dogs. Carry/use dog/animal repellant. Use bug spray when needed;<br>7. Wear hearing protection;<br>8. Wear hard hat / Avoid areas were overhead hazards exist;<br>9. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather). Drink plenty of fluids to avoid dehydration. Take breaks as necessary to avoid heat/cold stress;<br>10. Wear safety glasses |

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| LANGAN | Job Safety Analysis (JSA)<br>Health and Safety |
|---|---|
| **JSA Title:** Groundwater Sampling<br>**JSA Number:** JSA008-01 |  <br>**S** – ***Stop,*** *what has changed?*<br>**T** – ***Think*** *about the task*<br>**E** – ***Evaluate*** *potential hazards*<br>**P** – ***Plan*** *safe approach*<br>**S** - ***Start*** *task /* ***Stop*** *& regroup* |
| **A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.** | |

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☒ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: Tyvek sleeves, Dermal Protection, PID | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 47. Transport equipment to work area | 1. Back Strain<br>2. Slips/ Trips/ Falls<br>3. Traffic<br>4. Cuts/abrasions from equipment<br>5. Contusions from dropped equipment | 1. Use proper lifting techniques / Use wheeled transport.<br>2. Minimize distance to work area / Have unobstructed path to work area / Follow good housekeeping procedures.<br>3. Wear proper PPE (high visibility vest or clothing)<br>4. Wear proper PPE (leather gloves, long sleeves)<br>5. Wear proper PPE (safety shoes) |
| 48. Remove well cover | 26. Scrape knuckles/hand<br>27. Strain wrist/bruise palm<br>28. Pinch fingers or hand | 3. Wear proper PPE (leather gloves)<br>4. Using a hammer, tap the end of the wrench to loosen grip of bolts.<br>5. Wear proper PPE (leather gloves) |
| 49. Remove well cap and lock | 11. Well can pops from pressure.<br>12. Exposure to hazardous substances through inhalation or dermal exposure<br>13. Scrape knuckles/hand<br>14. Strain write/bruise palm | 5. Remove cap slowly to relieve pressure / Do not place face over well when opening / Wear proper PPE (safety glasses)<br>6. Use direct air monitoring/reading instrument (i.e., PID) / Be familiar with and follow actions prescribed in the HASP / Wear proper PPE (nitrile gloves)<br>7. Wear proper PPE (leather gloves)<br>8. Using hammer, tap the end of the wrench to loosen grip |
| 50. Measure head-space vapor levels | 1. Exposure to hazardous substances through inhalation | 1. Do not place face over well when collecting measurement |
| 51. Remove dedicated tubing (if necessary) | 1. Exposure to hazardous substances through inhalation or dermal exposure<br>2. Tubing swings around after removal | 1. Wear proper PPE (nitrile gloves, Tyvek sleeves)<br>2. Wear proper PPE (safety glasses) |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 52. Set-up plastic sheeting for work site around the well | 1. Lacerations when cutting plastic sheeting. | 1. Use scissors to cut plastic sheeting / Cut motions should always be away from body and body parts |
| 53. Measure depth to water | 1. Exposure to hazardous substances through inhalation or dermal exposure<br>2. Pinch fingers or hand in water level instrument | 1. Wear proper PPE (nitrile gloves)<br>2. Wear proper PPE (leather gloves) |
| 54. Calibrate monitoring equipment | 1. Skin or eye contact with calibration chemicals<br>2. Pinch fingers or hand in monitoring equipment | 1. Wear proper PPE (safety glasses, nitrile gloves)<br>2. Wear proper PPE (leather gloves) / Avoid pinch points |
| 55. Install sampling pump in well | 1. Hand injuries during installation of pump<br>2. Lacerations when cutting tubing.<br>3. Back strain during installation of pump<br>4. Physical hazards associated with manual lifting of heavy equipment.<br>5. Back strain from starting generator.<br>6. Burns from hot exhaust from generator.<br>7. Electrical shock from improper use of generator and pump<br>8. Contaminated water spray from loose connections | 1. Wear proper PPE (leather gloves, nitrile gloves)<br>2. Use safety tubing cutter.<br>3. Use proper lifting techniques.<br>4. Use proper lifting techniques / Use wheeled transport for heavy equipment.<br>5. Use arm when starting generator / Do not over-strain if generator does not start.<br>6. Do not touch generator near exhaust / Use proper handle to carry / Allow generator to cool down before moving.<br>7. Properly plug in pump to generator / Do not allow the pump or generator to contact water / Check for breaks in the cord.<br>8. Check all tubing connections to ensure they are tight and secure |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 10. Purge water | 1. Contact with potentially contaminated groundwater.<br>2. Back strain from lifting buckets of water<br>3. Tripping potential on sample discharge lines and pump electric lines | 1. Wear proper PPE (safety glasses, nitrile gloves)<br>2. Use proper lifting techniques / Use wheeled transport.<br>3. Organize discharge of electric line to keep out of way as much as possible / Mark potential tripping hazards with caution tape or safety cones |
| 11. Sample water collection | 1. Contact with potentially contaminated groundwater through dermal exposure.<br>2. Contact with and burns from acid used for sample preservation.<br>3. Tripping potential on sample discharge lines and pump electric lines<br>4. Lacerations from broken sample bottles<br>5. Back strain when transporting coolers full of collected samples.<br>6. Slips/ Trips/ Falls | 1. Wear proper PPE (safety glasses, nitrile gloves)<br>2. Wear proper PPE (safety glasses, nitrile gloves) / Ensure sample bottle lids are secure before use and after sample collection.<br>3. Organize line to keep out of the way as much as possible / Mark potential tripping hazards with caution tape or safety cones.<br>4. Do not over-tighten bottle caps / Handle bottles safely to prevent breakage / Wrap glass bottles in bubble wrap, if possible<br>5. Use proper lifting techniques / Use wheeled transport / Seek assistance if coolers weight exceeds 50lbs. / Minimize distance to vehicle.<br>6. Have unobstructed path to vehicle or collection point / Follow good housekeeping procedures / Do not lift/walk with coolers that are too heavy/difficult to lift |
| 12. Remove pump and pack up equipment | 1. Back strain when removing pump or lifting heavy equipment | 1. Use proper lifting technique / Use wheeled transport for heavy equipment |
| 13. Replace well cap and lock | 1. Scrape fingers/hand<br>2. Strain wrist/bruise palm | 1. Wear proper PPE (leather gloves)<br>2. Using hammer, tap the end of the well cap to tighten grip |
| 14. Replace well cover | 1. Scrape knuckles/hand<br>2. Strain write/bruise palm.<br>3. Pinch fingers or hand | 1. Wear proper PPE (leather gloves)<br>2. Using hammer, tap the end of the wrench to tighten the grip of the bolts.<br>3. Wear proper PPE (leather gloves) |
| 15. Transport drums to disposal staging location | 1. Back, arm or shoulder strain from moving drums.<br>2. Pinch hazard<br>3. Contact with potentially contaminated groundwater when moving improperly sealed drums.<br>4. Slips/ Trips/ Falls when moving drum.<br>5. Drop drum on feet/toes | 1. Use drum cart for moving drums / Use proper lifting techniques / Obtain assistance, if needed<br>2. Wear proper PPE (leather gloves)<br>3. Wear proper PPE (nitrile gloves under leather gloves) / Properly seal drum to prevent leak.<br>4. Ensure route to move drum to storage space is dry and free from obstructions.<br>5. Wear proper PPE (safety shoes) |
| 16. Place used PPE in designated disposal drum | 1. Pressure build-up inside drum<br>2. Pinch hazard | 1. Remove cap from bung hole in drum to relieve pressure.<br>2. Wear proper PPE (leather gloves) |
| 17. Decontaminate equipment | 1. Splashing water/soap from decontamination<br>2. Contact with potentially contaminated groundwater through dermal exposure.<br>3. Electrical shock from broken electric cords | 1. Wear proper PPE (safety glasses)<br>2. Wear proper PPE (safety glasses, dermal protection)<br>3. Properly plug in pump to generator / Do not allow the pump or generator to contact water / Check for breaks in the cord |
| 18. All activities | 60. Slips/ Trips/ Falls<br>61. Hand injuries, cuts, or lacerations during manual handling of materials<br>62. Foot injuries<br>63. Back injuries<br>64. Traffic<br>65. Wildlife: Stray dogs, Mice/rats, Vectors (i.e., mosquitoes, bees, etc.) | 71. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards.<br>72. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves.<br>73. Wear Langan approved safety shoes. |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | 66. High Noise levels<br>67. Overhead hazards<br>68. Heat Stress/ Cold Stress<br>69. Eye Injuries | 74. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible.<br>75. Wear high visibility clothing & vest / Use cones or signs to designate work area.<br>76. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed.<br>77. Wear hearing protection<br>78. Wear hard hat / Avoid areas where overhead hazards exist.<br>79. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress.<br>80. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

| Print Name | Sign Name | Date |
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# LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title:** **Well Installation**
**JSA Number:** **JSA019-01**

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.**




**S – *Stop,* what has changed?**
**T – *Think* about the task**
**E – *Evaluate* potential hazards**
**P – *Plan* safe approach**
**S - *Start* task / *Stop* & regroup**

| **PERSONAL PROTECTIVE EQUIPMENT REQUIRED:** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: PID, Tyvek sleeves | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 56. Move equipment to work site | 30. Back strain when lifting equipment.<br>31. Slips/ Trips/ Falls while moving equipment.<br>32. Traffic (if applicable)<br>33. Pinched fingers or running over toes during GeoProbe set-up.<br>34. Overturn drilling rig while transporting to loading dock on flat-bed tow truck | 25. Use proper lifting technique (use legs for bending and lifting and not the back)/ Use wheeled transport for heavy equipment / Get assistance when handling loads greater than 50 lbs. / Minimize distance to vehicle<br>26. Use proper lifting technique (use legs for bending and lifting and not the back) / Use wheeled transport for heavy equipment / Get assistance when handling loads greater than 50 lbs. / Minimize distance to vehicle / Have unobstructed path to vehicle or collection point / Do not lift/walk with boxes that are heavy/difficult to lift<br>27. Wear high visibility safety vests or clothing / Exercise caution<br>28. Wear proper PPE (cut-resistant gloves) / Stay alert, be aware of geoprobe rig at all times<br>29. Drill rig should be parked in center of flat-bed tow truck / Emergency brake shall be used at all times during transport on the flat-bed truck/ All unnecessary personnel should stay away from the flat-bed truck during moving activities |
| 57. Calibration of monitoring equipment | 29. Skin or eye contact with calibration chemicals<br>30. Pinch fingers in monitoring equipment | 26. Wear proper PPE (safety glasses/ goggles)<br>27. Wear proper PPE (leather gloves) |
| 28. Set-up GeoProbe rig | 15. Geoprobe rig movement | 9. All field personnel should stay clear of the GeoProbe rig while moving / Use a spotter when backing up the GeoProbe |
| 29. Advance GeoProbe rods below ground surface to desired depth | 6. Underground utilities<br>7. High noise levels | 9. Clean all subsurface soil borings to a minimum of 5 feet below grade.<br>10. Wear proper PPE (hearing protection) |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 30. Remove and open acetate liner.<br><br>5. Remove and open acetate liner (cont'd) | 70. Pinched fingers while removing macrocore.<br>71. Cuts/lacerations when cutting acetate liner open.<br>72. Exposure to hazardous vapors<br>73. Skin contacts with contaminated soil | 5. Wear proper PPE (nitrile gloves, cut-resistant or leather gloves<br>6. Wear proper PPE (cut-resistant or leather gloves)<br>7. Do not place face over acetate liner when opening / Monitor hazardous vapors in air with PID / Upgrade PPE as necessary based on levels contained in the Health and Safety Plan<br>8. Wear proper PPE (nitrile gloves) |
| 6. Remove excess soil from acetate liner and place in 55-gallon drum (IF NOT PERFORMED BY LANGAN, REMOVE!) | 5. Cuts/lacerations from acetate liner<br>6. Pinched fingers/hand while opening/closing drum.<br>7. Skin contacts with contaminated soil<br>8. Soil debris in eyes | 5. Wear proper PPE (cut-resistant or leather gloves)<br>6. Wear proper PPE (cut-resistant or leather gloves)<br>7. Wear proper PPE (nitrile gloves)<br>8. Wear proper PPE (safety glasses) |
| 7. Attach hollow-stem augers to the GeoProbe rig; Advance augers and attach. additional augers until desired depth is reached | 1. Strain wrist/bruise palm<br>2. Pinched fingers<br>3. Back Strain<br>4. Clothing entanglement<br>5. Carbon monoxide poisoning<br>6. Bruise toes/foot<br>7. High noise levels<br>8. Skin contacts with contaminated soil | 1. Wear proper PPE (cut-resistant or leather gloves)<br>2. Wear proper PPE (cut-resistant or leather gloves)<br>3. Use proper lifting techniques.<br>4. Wear proper work attire(no loose clothing/strings)<br>5. Properly ventilate work area<br>6. Wear proper PPE (safety shoes)<br>7. Wear proper PPE (hearing protection)<br>8. Wear proper PPE (Tyvek sleeves, nitrile gloves) |
| 8. Install monitoring well | 1. Pinched fingers<br>2. Lacerations/abrasions<br>3. Back Strain | 1. Wear proper PPE (cut-resistant or leather gloves)<br>2. Wear proper PPE (cut-resistant or leather gloves)<br>3. Use proper lifting techniques |
| 9. Tremie-grout annulus space above bentonite seal | 1. Back strain<br>2. Pinched fingers | 1. Use proper lifting techniques.<br>2. Wear proper PPE (cut-resistant or leather gloves) |
| 10. Install flush-mount monitoring well pad | 1. Splashed concrete.<br>2. Pinched fingers<br>3. Cuts/lacerations | 1. Wear proper PPE (safety glasses)<br>2. Wear proper PPE (cut-resistant or leather gloves)<br>3. Wear proper PPE (cut-resistant or leather gloves) |
| 11. Decontaminate equipment | 1. Splashing water/soap<br>2. Contact with potentially contaminated groundwater/soil through dermal exposure.<br>3. Electrical shock from broken electric cords | 1. Wear proper PPE (safety glasses)<br>2. Wear proper PPE (safety glasses, dermal protection)<br>3. Properly plug in pump to generator / Do not allow the pump or generator to contact water / Check for breaks in the cord |
| 12. Transport drums to central staging location (IF NOT PERFORMED BY LANGAN, REMOVE!) | 7. Back, arm or shoulder strain from moving drums.<br>8. Pinch fingers/hand in drum cart when moving drums.<br>9. Pinch fingers/hand when operating lift-gate on vehicle.<br>10. Contact with potentially contaminated groundwater when moving improperly sealed drums.<br>11. Slips when moving drums.<br>12. Drop drum on feet/toes | 81. Use drum cart for moving drums / Use proper lifting techniques / Do not lift heavy loads without assistance.<br>82. Wear proper PPE (cut-resistant or leather gloves)<br><br>83. Wear proper PPE (cut-resistant or leather gloves)<br><br>84. Wear proper PPE (nitrile gloves underneath work gloves)<br><br>85. Follow good housekeeping procedures / Ensure route to move drum and storage space is free from obstructions.<br>86. Wear proper PPE (safety shoes) / Work in a safe manner to prevent dropped drum |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 13. All activities<br><br>13. All activities (cont'd) | 11. Slips/ Trips/ Falls<br>12. Hand injuries, cuts, or lacerations during manual handling of materials<br>13. Foot injuries<br>14. Back injuries<br>15. Traffic<br>16. Wildlife: Stray dogs, Mice/rats, Vectors (i.e., mosquitoes, bees, etc.)<br>17. High Noise levels<br>18. Overhead hazards<br>19. Heat Stress/ Cold Stress<br>20. Eye Injuries | 11. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards.<br>12. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves.<br>13. Wear Langan approved safety shoes.<br>14. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible.<br>15. Wear high visibility clothing & vest / Use cones or signs to designate work area.<br>16. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed.<br>17. Wear hearing protection<br>18. Wear hard hat / Avoid areas where overhead hazards exist.<br>19. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress.<br>20. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

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# LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title:** **Monitoring Well Development**
**JSA Number:** **JSA026-01**

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.**




| PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed): | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☐ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☒ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☒ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: Tyvek Sleeves | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 58. Transport equipment to work area | 35. Back Strains<br>36. Slips/Trips/Falls<br>37. Traffic<br>38. Cuts/Abrasions/Contusions from equipment | 30. Use proper lifting techniques/ Use wheeled transport/ use buddy system when lifting equipment.<br>31. Minimize distance from work area/ unobstructed path to collection points and vehicle/ Follow good housekeeping procedures.<br>32. Wear high-visibility vest or clothing/Exercise caution/ Use traffic cones or signage if needed.<br>33. Wear proper PPE (leather gloves, long sleeves, Langan approved safety shoes). |
| 59. Measure depth of water | 31. Exposure to hazardous substances<br>32. Pinched fingers | 31. Wear proper PPE (Nitrile gloves, Safety glasses/Face shield).<br>32. Wear proper PPE (cut-resistant gloves). |
| 60. Install Tremie pipe in the monitoring well and connect to water source. | 16. Hand injuries during installation (pinched fingers/hands).<br>17. Back strain from holding Tremie pipe.<br>18. High pressure water spray. | 10. Wear proper PPE (Nitrile gloves/cut-resistant gloves).<br>11. Use proper lifting techniques/ Use two personnel when lowering pump greater than 80 feet.<br>12. Ensure all those connections are tight and secure/ Use proper PPE (face shield and safety glasses). |
| 61. Install pump in to well.<br>a. Connect pump to sample tubing.<br>b. Lower pump to desired depth in well.<br>c. Connect sample tubing to flow cell.<br>d. Connect pump to power source | 8. Hand injuries during pump installation and sample tubing cutting.<br>9. Back strain<br>10. Electric shock<br>11. Exhaust gases from generator<br>12. Burns from hot equipment | 11. Wear proper PPE when installing pump and cutting sample tubing (Nitrile and cut-resistant gloves)/ Use tubing cutter.<br>12. Proper lifting techniques/ Two personnel when installing pump at depths greater than 80 feet/ Use buddy when lifting heavy loads (pump, generator)/Use wheeled transport.<br>13. Ensure equipment is (LO/TO: locked out/tagged out) prior to preforming any electrical connections/ Inspect wires for frays or cuts/Ensure generator is properly grounded prior to starting. |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| (generator)<br>e. Turn on power source (generator) | | 14. Position generator so that exhaust is flowing away from work area.<br>15. Do not touch exhaust or any hot part of generator/ Allow equipment time to cool down prior to carrying/ Use proper PPE (long sleeves, leather gloves) |
| 62. Develop monitoring well.<br>a. Jet water into well using Tremie pipe.<br>b. Turn pump on and adjust to desired flow rate.<br>c. Surge pump up and down well to remove sediment from screen.<br>d. Containerize all purge water from well. | 74. Hand injuries<br>75. Face injuries<br>76. Contaminated spray from water | 87. Wear proper PPE (cut-resistant gloves and nitrile gloves).<br>88. Wear proper PPE (face shield and safety glasses)/do not stand over well opening.<br>89. Wear proper PPE (Face shield and safety goggles)/Tyvek over garments/ Ensure all connections are secure and tight/ Tubing outlet is contained in an overflow container. |
| 63. Drum staging area. | 1. Back, Arm, and shoulder strain.<br>2. Pinch points<br>3. Cross contamination<br>4. Slip/Trips/Falls | 1. Use proper lifting techniques/ Use drum carts when moving drums/ use buddy system for moving of drums if needed/Move drums shortest distance needed.<br>2. Keep fingers and feet away from pinch points/ Use proper PPE (cut-resistant gloves, Langan approved safety shoes)<br>3. Use proper PPE (Nitrile gloves, Tyvek sleeves)<br>4. Ensure pathway is clear prior to moving equipment/ Mark all hazards/ Use additional person as a spotter if needed. |
| 64. Equipment pack-up | 1. Back Strains<br>2. Slips/Trips/Falls<br>3. Traffic<br>4. Cuts/Abrasions/Contusions from equipment. | 1. Use proper lifting techniques/ Use wheeled transport/ use buddy system when lifting equipment.<br>2. Minimize distance from work area/ Unobstructed path to collection points and vehicle/ Follow good housekeeping procedures.<br>3. Wear high-visibility vest or clothing/Exercise caution/ Use traffic cones or signage if needed.<br>90. Wear proper PPE (leather gloves, long sleeves, Langan approved safety shoes). |
| 65. All activities | 1. Slips/ Trips/ Falls<br>2. Hand injuries, cuts, or lacerations during manual handling of materials<br>3. Foot injuries<br>77. Back injuries<br>78. Traffic<br>79. Wildlife: Stray dogs, Mice/rats, Vectors (i.e., mosquitoes, bees, etc.)<br>80. High Noise levels<br>81. Overhead hazards<br>82. Heat Stress/ Cold Stress<br>83. Eye Injuries | 1. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards<br>2. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves<br>3. Wear Langan approved safety shoes<br>4. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible<br>5. Wear high visibility clothing & vest / Use cones or signs to designate work area<br>6. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed<br>7. Wear hearing protection<br>8. Wear hard hat / Avoid areas where overhead hazards exist.<br>9. Wear proper attire for weather conditions (sunscreen or protective clothing |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | | in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress<br>10. Wear safety glasses. |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

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# LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title:** **Groundwater/Product Purging/Sampling with Bailer**
**JSA Number:** **JSA053**

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.**




S – ***Stop,*** *what has changed?*
T – ***Think*** *about the task*
E – ***Evaluate*** *potential hazards*
P – ***Plan*** *safe approach*
S - ***Start*** *task /* ***Stop*** *& regroup*

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☒ Safety Goggles | ☒ Face Shield | ☒ Nitrile Gloves | ☒ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☒ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☒ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: Tyvek sleeves, Dermal Protection, PID, absorbent pads | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 66. Transport equipment to work area | 6. Back Strain<br>7. Slips/ Trips/ Falls<br>8. Traffic<br>9. Cuts/abrasions from equipment<br>10. Contusions from dropped equipment | 6. Use proper lifting techniques / Use wheeled transport.<br>7. Minimize distance to work area / Have unobstructed path to work area / Follow good housekeeping procedures.<br>8. Wear proper PPE (high visibility vest or clothing)<br>9. Wear proper PPE (leather gloves, long sleeves)<br>10. Wear proper PPE (safety shoes) |
| 67. Remove well cover | 33. Scrape knuckles/hand<br>34. Strain wrist/bruise plan<br>35. Pinch fingers or hand | 6. Wear proper PPE (leather gloves)<br>7. Using a hammer, tap the end of the wrench to loosen grip of bolts.<br>8. Wear proper PPE (leather gloves) |
| 68. Remove well cap and lock | 19. Well can pops from pressure.<br>20. Exposure to hazardous substances through inhalation or dermal exposure<br>21. Scrape knuckles/hand<br>22. Pinch points<br>23. Strain write/bruise palm | 9. Remove cap slowly to relieve pressure / Do not place face over well when opening / Wear proper PPE (safety glasses, face shield, hand protection)<br>10. Use direct air monitoring/reading instrument (i.e., PID) / Be familiar with and follow actions prescribed in the HASP / Wear proper PPE (nitrile gloves)<br>11. Wear proper PPE (leather gloves)<br>12. Using hammer, tap the end of the wrench to loosen grip |
| 69. Measure head-space vapor levels | 2. Exposure to hazardous substances through inhalation | 2. Do not place face over well when collecting measurement |
| 70. Set-up plastic sheeting/absorbent pads | 2. Lacerations when cutting plastic sheeting/absorbent pads. | 2. Use scissors to cut plastic sheeting/absorbent pads / Cut motions should always be away from body and body parts |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| for work site around the well | | |
| 71. Lower Bailer sleeve into well | 7. Repetitive motion injury (pulled arm/back muscles)<br>8. Dehydration | 7. Take breaks while lowering bailer into well/ Use a mechanical device to lower bailer into well/ Rotate employees (take turns conducting the manual labor portion)<br>8. Take breaks and drink water. |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 7. Purge/Sample water/product collection | 1. Contact with potentially contaminated groundwater or product through dermal exposure<br>2. Contact with and burns from acid used for sample preservation<br>9. Tripping potential on sampling lanyard<br>10. Lacerations from broken sample bottles<br>11. Back strain when transporting coolers full of collected samples.<br>12. Slips/ Trips/ Falls | 1. Wear proper PPE (safety glasses, nitrile gloves, safety shield, Tyvek)<br>2. Ensure sample bottle lids are secure before use and after sample collection<br>3. Organize lanyard to keep out of the way as much as possible / Mark potential tripping hazards with caution tape or safety cones<br>9. Do not over-tighten bottle caps / Handle bottles safely to prevent breakage / Wrap glass bottles in bubble wrap, if possible<br>10. Use proper lifting techniques / Use wheeled transport / Seek assistance if coolers weight exceeds 50lbs. / Minimize distance to vehicle.<br>11. Have unobstructed path to vehicle or collection point / Follow good housekeeping procedures / Do not lift/walk with coolers that are too heavy/difficult to lift |
| 8. Retrieval of bailer | 9. Repetitive motion injury (pulled arm/back muscles)<br>10. Dehydration | 9. Take breaks while retrieving bailer out of the well/ Use a mechanical device to raise bailer out of well/ Rotate employees (take turns conducting the manual labor portion)<br>10. Take breaks and drink water. |
| 9. Pack-up equipment | 2. Back strain when removing or lifting heavy equipment | 2. Use proper lifting technique / Use wheeled transport for heavy equipment |
| 10. Replace well cap and lock | 3. Scrape fingers/hand<br>4. Strain wrist/bruise palm | 3. Wear proper PPE (leather gloves)<br>4. Using hammer, tap the end of the well cap to tighten grip |
| 11. Replace well cover | 4. Scrape knuckles/hand<br>5. Strain write/bruise palm.<br>6. Pinch fingers or hand | 4. Wear proper PPE (leather gloves)<br>5. Using hammer, tap the end of the wrench to tighten the grip of the bolts.<br>6. Wear proper PPE (leather gloves) |
| 12. Place used PPE in designated disposal drum | 3. Pressure build-up inside drum<br>4. Pinch hazard | 3. Remove cap from bung hole in drum to relieve pressure.<br>4. Wear proper PPE (leather gloves)<br>5. Product drums may require additional spill protection/electrical grounding, check local regulations |
| 13. Decontaminate equipment | 4. Splashing water/soap from decontamination<br>5. Contact with potentially contaminated groundwater through dermal exposure. | 4. Wear proper PPE (safety glasses)<br>5. Wear proper PPE (safety glasses, dermal protection) |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 14. All activities | 84. Slips/ Trips/ Falls<br>85. Hand injuries, cuts, or lacerations during manual handling of materials<br>86. Foot injuries<br>87. Back injuries<br>88. Traffic<br>89. Wildlife: Stray dogs, Mice/rats, Vectors (i.e., mosquitoes, bees, etc.)<br>90. High Noise levels<br>91. Overhead hazards<br>92. Heat Stress/ Cold Stress<br>93. Eye Injuries | 91. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards.<br>92. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves.<br>93. Wear Langan approved safety shoes.<br>94. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible.<br>95. Wear high visibility clothing & vest / Use cones or signs to designate work area.<br>96. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed.<br>97. Wear hearing protection<br>98. Wear hard hat / Avoid areas where overhead hazards exist.<br>99. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress.<br>100. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

| Print Name | Sign Name | Date |
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LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title:** Hammer Drill
**JSA Number:** JSA049

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.**




S – ***Stop,*** *what has changed?*
T – ***Think*** *about the task*
E – ***Evaluate*** *potential hazards*
P – ***Plan*** *safe approach*
S - ***Start*** *task /* ***Stop*** *& regroup*

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☒ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☒ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☐ Other: | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 72.Transport equipment to work area | 39.Back Strain<br>40.Slips/ Trips/ Falls<br>41.Traffic<br>42.Cuts/abrasions from equipment<br>43.Contusions from dropped equipment | 6. Use proper lifting techniques / Use wheeled transport.<br>7. Minimize distance to work area / Have unobstructed path to work area / Follow good housekeeping procedures.<br>8. Wear proper PPE (high visibility vest or clothing)<br>9. Wear proper PPE (leather gloves, long sleeves)<br>10. Wear proper PPE (safety shoes) |
| 73.Electrical Connection | 36.Inspect electrical cord to drill.<br>37.Inspect hammer drill.<br>38.Inspect extension cord.<br>39.Test GFCI | 9. Check the plug, ensure all connections are in place, check cord for frayed sections. If plug or cord are worn, do not use equipment until repaired.<br>10. Inspect chuck for proper grasping and holding of bit, check that plastic housing is not cracked or missing pieces. Do not use if chuck does not work properly or housing is compromised.<br>11. Inspect extension cord, if worn or stripped pull from service and replace<br>12. Test GFCI, replace if GFCI fails |
| 74.Drill Bit | 1. Inspect drill bit | 1. Replace if worn.<br>2. Wear proper PPE (leather gloves) when installing and removing drill bit.<br>3. Ensure equipment is unplugged from electrical power when removing and installing drill bit. |
| 75.Use of Hammer Drill | 1. Hazards associated with using hammer drill, flying objects, heavy equipment, ground level hazards and dust.<br>2. Slips/ Trips/ Falls<br>3. Hazards associated drilling into concrete slab | 1. Maintain a safe distance from other site operations / Wear proper PPE (hard hat, safety glasses, safety shoes, safety vest, ear protection and leather gloves)<br>2. Be aware of potential trip hazards / Follow good housekeeping procedures / Mark extension cord pathway with safety cones.<br>3. Do not push hammer drill during use. |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 76. All activities<br><br>4. All activities (cont'd) | 94. Slips/ Trips/ Falls<br>95. Hand injuries, cuts, or lacerations during manual handling of materials<br>96. Foot injuries<br>97. Back injuries<br>98. Traffic<br>99. Wildlife: Stray dogs, Mice/rats, Vectors (i.e., mosquitoes, bees, etc.)<br>100. High Noise levels<br>101. Overhead hazards<br>102. Heat Stress/ Cold Stress<br>103. Eye Injuries | 101. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards.<br>102. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery, or dirty objects before handling / Wear leather/ cut-resistant gloves.<br>103. Wear Langan approved safety shoes.<br>104. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible.<br>105. Wear high visibility clothing & vest / Use cones or signs to designate work area.<br>106. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed.<br>107. Wear hearing protection<br>108. Wear hard hat / Avoid areas where overhead hazards exist.<br>109. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress.<br>110. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

| Print Name | Sign Name | Date |
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# LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title:** Hand Auger Soil Sampling
**JSA Number:** JSA003-01

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.**




**S** – ***Stop,*** *what has changed?*
**T** – ***Think*** *about the task*
**E** – ***Evaluate*** *potential hazards*
**P** – ***Plan*** *safe approach*
**S** - ***Start*** *task /* ***Stop*** *& regroup*

| PERSONAL PROTECTIVE EQUIPMENT REQUIRED: | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☒ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: Half-face respirator, dust cartridges, PID (if applicable) | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 77. Unpack equipment | 44. Slips/ Trips/ Falls<br>45. Physical hazards including strains and hand injury | 1. Be aware of hazards in area/ Place safety cones in areas of potential slips/trips/falls<br>2. Use proper lifting techniques / Do not lift heavy loads without assitance / Avoid putting hands near pinch points / Wear proper PPE (leather gloves) |
| 78. Calibration of monitoring equipment | 40. Skin or eye contact with calibration chemicals<br>41. Pinch fingers in monitoring equipment | 33. Wear proper PPE (safety glasses/ goggles)<br>34. Wear proper PPE (leather gloves) |
| 79. Advancing and removing hand auger | 24. Physical hazards including back strain and hand injury | 13. Twist auger using arms and shoulders/ Do not over exert / Keep back in neutral position, bend at the knees / Request assistance when needed / Remove auger from ground keeping back in neutral position and lift using legs |
| 80. Sample collections<br>a) Monitor parameters<br>b) Prepare sample containers and labels<br>c) Collect soil sample<br>d) Securely cap containers, label and store in sample cooler until shipping<br>e) Deliver cooler to lab or courier to lab | 13. Contact with potentially contaminated soil<br>14. Lacerations from broken sample bottles<br>15. Back strain with transporting coolers<br>16. Internal exposure to contaminants through inhalation of dust<br>17. Slips/ Trips/ Falls | 16. Use monitoring devices / Wear proper PPE (safety glasses, nitrile gloves)<br>17. Do not over-tighten bottles caps / Handle bottles safety to prevent breakage<br>18. Use proper lifting techniques / Do not lift heavy loads without assistance<br>19. Avoid creating dust / If necessary, wear a half-face respirator with applicable dust cartridges / Inspect respirator for damage and cleanliness prior to use / Clean respirator after each use and store in a clean, secure location<br>20. Be alert / Follow good housekeeping procedures |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 81. Decontamination of equipment | 104. Splashing water/soap from decontamination<br>105. Contact with potentially contaminated soil | 111. Wear proper PPE (safety glasses, gloves)<br>112. Wear proper PPE (safety glasses, gloves) |
| 82. All activities<br><br><br><br>6. All activities (cont'd) | 1. Slips/ Trips/ Falls<br><br>2. Hand injuries, cuts or lacerations during manual handling of materials<br><br>3. Foot injuries<br>4. Back injuries<br><br><br>5. Traffic<br><br>6. Wildlife: Stray dogs, Mice/rats, Vectors (i.e. mosquitoes, bees, etc.)<br><br>7. High Noise levels<br>8. Overhead hazards<br>9. Heat Stress/ Cold Stress<br><br><br>10. Eye Injuries | 1. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards<br>2. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery or dirty objects before handling / Wear leather/ cut-resistant gloves<br>3. Wear Langan approved safety shoes<br>4. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible<br>5. Wear high visibility clothing & vest / Use cones or signs to designate work area<br>6. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed<br>7. Wear hearing protection<br>8. Wear hard hat / Avoid areas were overhead hazards exist.<br>9. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress<br>10. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

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| LANGAN | Job Safety Analysis (JSA)<br>Health and Safety |
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| **JSA Title:** Groundwater/Product Purging/Sampling with Bailer<br>**JSA Number:** JSA053<br>**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last Minute Risk Assessment.** |  <br>S – **Stop,** *what has changed?*<br>T – ***Think*** *about the task*<br>E – ***Evaluate*** *potential hazards*<br>P – ***Plan*** *safe approach*<br>S - ***Start*** *task /* ***Stop*** *& regroup* |

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☒ Safety Goggles | ☒ Face Shield | ☒ Nitrile Gloves | ☒ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☒ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☒ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: Tyvek sleeves, Dermal Protection, PID, absorbent pads | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 83. Transport equipment to work area | 11. Back Strain<br>12. Slips/ Trips/ Falls<br>13. Traffic<br>14. Cuts/abrasions from equipment<br>15. Contusions from dropped equipment | 11. Use proper lifting techniuqes / Use wheeled transport<br>12. Minimize distance to work area / Have unobstructed path to work area / Follow good housekeeping procedures<br>13. Wear proper PPE (high visibility vest or clothing)<br>14. Wear proper PPE (leather gloves, long sleeves)<br>15. Wear proper PPE (safety shoes) |
| 84. Remove well cover | 42. Scrape knuckles/hand<br>43. Strain wrist/bruise plan<br>44. Pinch fingers or hand | 13. Wear proper PPE (leather gloves)<br>14. Using a hammer, tap the end of the wrench to loosen grip of bolts<br>15. Wear proper PPE (leather gloves) |
| 85. Remove well cap and lock | 25. Well can pops from pressure<br>26. Exposure to hazardous substances through inhalation or dermal exposure<br>27. Scrape knuckles/hand<br>28. Pinch points<br>29. Strain write/bruise palm | 13. Remove cap slowly to relieve pressure / Do not place face over well when opening / Wear proper PPE (safety glasses, face shield, hand protection)<br>14. Use direct air monitoring/reading instrument (i.e. PID) / Be familiar with and follow actions prescribed in the HASP / Wear proper PPE (nitrile gloves)<br>15. Wear proper PPE (leather gloves)<br>16. Using hammer, tap the end of the wrench to loosen grip |
| 86. Measure head-space vapor levels | 3. Exposure to hazardous substances through inhalation | 3. Do not place face over well when collecting measurement |
| 87. Set-up plastic sheeting/absorbent pads for work site around the well | 3. Lacerations when cutting plastic sheeting/absorbent pads | 3. Use scissors to cut plastic sheeting/absorbent pads / Cut motions should always be away from body and body parts |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 88. Lower Bailer sleeve into well | 12. Repetitive motion injury (pulled arm/back muscles)<br>13. Dehydration | 13. Take breaks while lowering bailer into well/ Use a mechanical device to lower bailer into well/ Rotate employees (take turns conducting the manual labor portion)<br>14. Take breaks and drink water. |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 7. Purge/Sample water/product collection | 1. Contact with potentially contaminated groundwater or product through dermal exposure<br>2. Contact with and burns from acid used for sample preservation<br>15. Tripping potential on sampling lanyard<br>16. Lacerations from broken sample bottles<br>17. Back strain when transporting coolers full of collected samples<br>18. Slips/ Trips/ Falls | 1. Wear proper PPE (safety glasses, nitrile gloves, safety shield, Tyvek)<br>2. Ensure sample bottle lids are secure before use and after sample collection<br>3. Organize lanyard to keep out of the way as much as possible / Mark potential tripping hazards with caution tape or safety cones<br>14. Do not over-tighten bottle caps / Handle bottles safely to prevent breakage / Wrap glass bottles in bubble wrap, if possible<br>15. Use proper lifting techniques / Use wheeled transport / Seek assistance if coolers weight exceeds 50lbs. / Minimize distance to vehicle<br>16. Have unobstructed path to vehicle or collection point / Follow good housekeeping procedures / Do not lift/walk with coolers that are too heavy/difficult to lift |
| 8. Retrieval of bailer | 11. Repetitive motion injury (pulled arm/back muscles)<br>12. Dehydration | 11. Take breaks while retrieving bailer out of the well/ Use a mechanical device to raise bailer out of well/ Rotate employees (take turns conducting the manual labor portion)<br>12. Take breaks and drink water. |
| 9. Pack-up equipment | 3. Back strain when removing or lifting heavy equipment | 3. Use proper lifting technique / Use wheeled transport for heavy equipment |
| 10. Replace well cap and lock | 5. Scrape fingers/hand<br>6. Strain wrist/bruise palm | 5. Wear proper PPE (leather gloves)<br>6. Using hammer, tap the end of the well cap to tighten grip |
| 11. Replace well cover | 7. Scrape knuckles/hand<br>8. Strain write/bruise palm<br>9. Pinch fingers or hand | 7. Wear proper PPE (leather gloves)<br>8. Using hammer, tap the end of the wrench to tighten the grip of the bolts<br>9. Wear proper PPE (leather gloves) |
| 12. Place used PPE in designated disposal drum | 5. Pressure build-up inside drum<br>6. Pinch hazard | 6. Remove cap from bung hole in drum to relieve pressure<br>7. Wear proper PPE (leather gloves)<br>8. Product drums may require additional spill protecton/electrical grounding, check local regulations |
| 13. Decontaminate equipment | 6. Splashing water/soap from decontamination<br>7. Contact with potentially contaminated groundwater through dermal exposure | 6. Wear proper PPE (safety glasses)<br>7. Wear proper PPE (safety glasses, dermal protection) |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 14. All activities | 106. Slips/ Trips/ Falls<br>107. Hand injuries, cuts or lacerations during manual handling of materials<br>108. Foot injuries<br>109. Back injuries<br>110. Traffic<br>111. Wildlife: Stray dogs, Mice/rats, Vectors (i.e. mosquitoes, bees, etc.)<br>112. High Noise levels<br>113. Overhead hazards<br>114. Heat Stress/ Cold Stress<br>115. Eye Injuries | 113. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards<br>114. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery or dirty objects before handling / Wear leather/ cut-resistant gloves<br>115. Wear Langan approved safety shoes<br>116. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible<br>117. Wear high visibility clothing & vest / Use cones or signs to designate work area<br>118. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed<br>119. Wear hearing protection<br>120. Wear hard hat / Avoid areas were overhead hazards exist.<br>121. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress<br>122. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

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# LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title:** **Sub-slab soil gas temporary point installation and sampling**
**JSA Number:** **JSA037-01**

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last Minute Risk Assessment.**




S – ***Stop,*** *what has changed?*
T – ***Think*** *about the task*
E – ***Evaluate*** *potential hazards*
P – ***Plan*** *safe approach*
S - ***Start*** *task /* ***Stop*** *& regroup*

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☐ Hearing Protection |
| ☒ Safety Glasses | ☒ Safety Goggles | ☐ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☒ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☒ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: Tyvek Sleeves | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 89. Transport equipment to work site | 46. Back injuries<br>47. Slips/Trips/Falls<br>48. Traffic<br>49. Hand injuries | 34. Use proper lifting techniques/ Use wheeled transport/ Get assistance when need with moving equipment/ Minimize distance from vehicle<br>35. Minimize distance from vehicle/ Have unobstructed pathway to vehicle and collection points/ Mark tripping hazards with spray paint, cones, or caution tape/ Observe good housekeeping procedures.<br>36. Wear proper PPE (High Visibility vest and clothing)/ Exercise caution (stay alert-stay alive)<br>37. Wear proper PPE (leather gloves)/ Keep finger and hands clear of pinch points. |
| 90. Mark area for drilling | 45. Slips/Trips/Falls | 35. Minimize distance from vehicle/ Have unobstructed pathway to vehicle and collection points/ Mark tripping hazards with spray paint, cones, or caution tape/ Observe good housekeeping procedures |
| 91. Drill sampling points with hammer drill | 30. Eye injuries<br>31. Dust exposure<br>32. Hand injuries<br>33. Catch items (clothing)<br>34. Electric shock<br>35. Chemical atmosphere hazard (vapor)<br>36. Slips/Trips/Falls | 14. Wear proper PPE (safety glasses)<br>15. Wear proper PPE (dust mask)<br>16. Wear proper PPE (leather gloves)/ Keep hands and fingers out of pinch points/ Avoid drill catching on ground and twisting wrist or hand/ Release drill grip if drill becomes caught/ Ensure drill is unplugged prior to inserting bit.<br>17. Tie up or tuck-in all loose clothing/ Maintain distance from drill<br>18. Inspect power cable for cuts or nicks before use/ Use GFCI outlet on power cord/ Do not use in wet conditions<br>19. Monitor air, vapors with Photo-ionization detector (PID) |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | | 20. Minimize distance from vehicle/ Have unobstructed pathway to vehicle and collection points/ Mark tripping hazards with spray paint, cones, or caution tape/ Observe good housekeeping procedures |
| 92. Measure vapor content and depth to bottom of hole | 1. Chemical atmosphere hazard (vapors) | 1. Monitor air, vapors with Photo-ionization detector (PID)/ Keep face away from opening of hole while collecting measurements |
| 93. Set-up of shroud and sampling canister system | 1. Hand injuries<br>2. Chemical atmosphere hazard (vapors)<br>3. Slips/Trips/Falls | 1. Wear proper PPE (leather gloves, nitrile gloves)/ Keep fingers away from pinch points when installing pump/ Do not use open blades, use tubing cutter<br>2. Monitor air, vapors with Photo-ionization detector (PID)/ Keep face away from opening of hole while collecting measurements<br>3. Minimize distance from vehicle/ Have unobstructed pathway to vehicle and collection points/ Mark tripping hazards with spray paint, cones, or caution tape/ Observe good housekeeping procedures |
| 94. Purge soil gas | 1. Chemical atmosphere hazard (vapors) | 1. Monitor air, vapors with Photo-ionization detector (PID)/ Keep face away from exhaust port of pump |
| 95. Sample collection (opening and closing valves) | 1. Hand injuries | 1. Wear proper PPE (leather gloves)/ Keep fingers away from pinch points |
| 96. Sealing sampling holes | 1. Back injuries<br>2. Concrete dust<br>3. Eye injuries | 1. Use proper lifting techniques for lifting of cement bags<br>2. Wear proper PPE (dust mask)<br>3. Wear proper PPE ( safety glasses) |
| 97. All activities | 116. Slips/ Trips/ Falls<br>117. Hand injuries, cuts or lacerations during manual handling of materials<br>118. Foot injuries<br>119. Back injuries<br>120. Traffic<br>121. Wildlife: Stray animals, Mice/rats, Vectors (i.e. mosquitoes, bees, etc.)<br>122. High Noise levels<br>123. Overhead hazards<br>124. Heat or cold injuries<br>125. Eye Injuries | 123. Be aware of potential trip hazards/ Follow good housekeeping procedures/ Mark significant hazards<br>124. Inspect for jagged/sharp edges, and rough or slippery surfaces/ Keep fingers away from pinch points/ Wipe off greasy, wet, slippery or dirty objects before handling/ Wear leather/ cut-resistant gloves<br>Wear proper PPE (Langan approved safety shoes)<br>125. Use proper lifting techniques/ Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift/ Obtain assistance when possible<br>126. Wear high visibility clothing & vest/ Use cones or signs to designate work area<br>127. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray animals/ Carry and use animal repellant when needed/ Use bug spray when needed<br>128. Wear hearing protection<br>129. Wear hard hat/ Avoid areas were overhead hazards exist.<br>130. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather)/ Drink plenty of fluids to avoid dehydration/ Takes breaks as necessary to avoid heat/cold stress<br>131. Wear safety glasses |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

| Print Name | Sign Name | Date |
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| ***Prepared by:*** | | |
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# LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title: Indoor Air Sampling**
**JSA Number: JSA007-01**

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last Minute Risk Assessment.**




**S – *Stop,* what has changed?**
**T – *Think* about the task**
**E – *Evaluate* potential hazards**
**P – *Plan* safe approach**
**S - *Start* task / *Stop* & regroup**

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☒ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: PID, Respiratory Protection (if necessary) | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 98. Building walkthrough and background contaminant removal | 50. Slips / Trips/ Falls<br>51. Exposure to substances/vapors during removal | 11. Be aware of potential trip hazards / Follow good housekeeping procedures / Mark significant below-grade hazards (i.e. holes, trenches) with safety cones or spray paint<br>12. Monitor indoor air concentrations with a PID / Wear proper PPE (nitrile gloves) / Wear proper respiratory protection if necessary |
| 99. Transport equipment to work area | 16. Back Strain<br>17. Slips/ Trips/ Falls<br>18. Traffic<br>19. Cuts/abrasions from equipment<br>20. Contusions from dropped equipment | 16. Use proper lifting techniques / Use wheeled transport<br>17. Minimize distance to work area / Have unobstructed path to work area / Follow good housekeeping procedures<br>18. Wear proper PPE (high visibility vest or clothing)<br>19. Wear proper PPE (leather gloves, long sleeves)<br>20. Wear proper PPE (safety shoes) |
| 100. Mark out areas for indoor air sampling | 46. Slips/ Trips/ Falls | 16. Be aware of potential trip hazards / Follow good housekeeping procedures / Mark significant below-grade hazards (i.e. holes, trenches) with safety cones or spray paint |
| 101. Set-up canisters and begin indoor air sampling | 37. Dropping crates or canisters<br>38. Pinch hazard | 17. Exercise caution when moving crates and canisters / Use proper housekeeping of materials during sample events / Do not carry too many items at one time / Perform several trips, if necessary<br>18. Wear proper PPE (leather gloves) |
| 102. Sample collection | 4. Dropping crates or canisters<br>5. Pinched fingers from opening valves | 4. Exercise caution when moving crates and canisters / Use proper housekeeping of materials during sample events / Do not carry too many items at one time / Perform several trips, if necessary<br>5. Wear proper PPE (leather gloves) / Keep fingers away from pinch points |
| 103. Pack up equipment | 3. Back strain | 3. Use proper lifting techniques / Use wheeled transport |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | 4. Slips/ Trips/ Falls<br>5. Traffic | 4. Be aware of potential trip hazards / Follow good housekeeping procedures / Minimize distance to vehicle<br>5. Wear proper PPE (safety vest) |
| 104. All activities | 126. Slips/ Trips/ Falls<br>127. Hand injuries, cuts or lacerations during manual handling of materials<br>128. Foot injuries<br>129. Back injuries<br>130. Traffic<br>131. Wildlife: Stray dogs, Mice/rats, Vectors (i.e. mosquitoes, bees, etc.)<br>132. High Noise levels<br>133. Overhead hazards<br>134. Heat Stress/ Cold Stress<br>135. Eye Injuries | 132. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards<br>133. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery or dirty objects before handling / Wear leather/ cut-resistant gloves<br>134. Wear Langan approved safety shoes<br>135. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible<br>136. Wear high visibility clothing & vest / Use cones or signs to designate work area<br>137. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed<br>138. Wear hearing protection<br>139. Wear hard hat / Avoid areas were overhead hazards exist.<br>140. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress<br>141. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

| Print Name | Sign Name | Date |
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| ***Prepared by:*** | | |
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| ***Reviewed by:*** | | |
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# LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title:** Geotechnical Drilling
**JSA Number:** JSA014-01

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last-Minute Risk Assessment.**




S – ***Stop,*** *what has changed?*
T – ***Think*** *about the task*
E – ***Evaluate*** *potential hazards*
P – ***Plan*** *safe approach*
S - ***Start*** *task / **Stop** & regroup*

| PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed): | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☒ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: NomeX (as needed) | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 105. Transport equipment to work area | 52. Back Strain<br>53. Slips/ Trips/ Falls<br>54. Traffic<br>55. Cuts/abrasions from equipment<br>56. Contusions from dropped equipment | 13. Use proper lifting techniques / Use wheeled transport.<br>14. Minimize distance to work area / Have unobstructed path to work area / Follow good housekeeping procedures.<br>15. Wear proper PPE (high visibility vest or clothing)<br>16. Wear proper PPE (leather gloves, long sleeves)<br>17. Wear proper PPE (safety shoes) |
| 106. Set-up HSA/SPT rig | 47. Slips/ Trips/ Falls<br>48. Pinch Hazards<br>49. High noise levels<br>50. Clothing entanglement<br>51. Electrocution/falling equipment and debris from raising HSA/SPT rig mast.<br>52. Carbon monoxide poisoning<br>53. HSA/SPT rig roll-over<br>54. HSA/SPT rig movement | 17. Be aware of potential trip hazards / Follow good housekeeping procedures / Mark significant below-grade hazards (i.e., holes, trenches) with safety cones or spray paint<br>18. Wear proper PPE (leather gloves)<br>19. Wear proper PPE (hearing protection)<br>20. Wear proper attire for HSA/SPT rig (no loose clothing, strings, etc.)<br>21. Wear proper PPE (hard hats) / Be aware of locations at all times / Look up, down and around before raising mast / Check HSA/SPT drill rig mast for loose objects/debris before raising<br>22. Stand upwind of rig engine<br>23. Do not move rig with mast raised / Set stabilizers prior to raising mast / Inspect work area / If area appears unstable, the boring locations should be moved.<br>24. All field personnel should stay clear of rig while moving / Use a spotter when backing up the rig |
| 107. Advance HSA/SPT rods, augers, and casing below ground surface | 39. Strain wrist/bruise palm<br>40. Pinched fingers<br>41. Back strain | 19. Wear proper PPE (leather gloves) / Use proper technique for preparing rods / Use second person, if necessary<br>20. Wear proper PPE (leather gloves) |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 108. Advance HSA/SPT rods, augers, and casing below ground surface (cont'd) | 42. Clothing entanglement<br>43. Carbon monoxide poisoning<br>44. Bruised/Broken toes/feet<br>45. High noise levels | 21. Use proper lifting techniques / Obtain assistance if needed<br>22. Wear proper attire for HSA/SPT rig (no loose clothing, strings, etc.)<br>23. Stand upwind of the rig<br>24. Wear proper PPE (safety shoes)<br>25. Wear proper PPE (hearing protection) |
| 109. Remove and open split spoon | 18. Pinched fingers<br>19. Cuts/lacerations<br>20. Skin contact with contaminated soil and groundwater | 1. Wear proper PPE (nitrile and leather gloves)<br>2. Wear proper PPE (leather gloves)<br>3. Wear proper PPE (nitrile gloves, safety glasses) |
| 110. Repeat steps 3 and 4 until desired depth is reached | 1. See steps 3 and 4 | 1. See steps 3 and 4 |
| 111. Remove HSA/SPT rods, augers and casing and place in storage rack | 1. Clothing entanglement<br>2. Back strain<br>3. Pinched fingers<br>4. Carbon monoxide poisoning<br>5. High noise levels | 1. Wear proper attire for HSA/SPT rig (no loose clothing, strings, etc.)<br>2. Use proper lifting techniques / Obtain assistance if needed<br>3. Wear proper PPE (leather gloves)<br>4. Stand upwind of rig engine<br>5. Wear proper PPE (hearing protection) |
| 112. Tremie-grout borehole with a cement-bentonite grout mixture | 1. Splash cement/bentonite grout on face/eyes<br>2. Back strain<br>3. Pinched fingers | 1. Wear proper PPE (safety glasses)<br>2. Use proper lifting techniques / Obtain assistance if needed<br>3. Wear proper PPE (nitrile gloves, leather gloves) |
| 113. Decontaminate equipment | 1. Contact with potentially impacted material<br>2. Contact with sharp pieces of equipment | 1. Wear proper PPE (safety glasses, nitrile gloves)<br>2. Wear proper PPE (leather gloves) |
| 114. Patch soil boring location to return to pre-existing conditions (i.e. concrete, asphalt, grass) | 1. Cuts/lacerations<br>2. Splashed concrete on face/eyes<br>3. Hammer fingers/hands when patching asphalt | 1. Wear proper PPE (leather gloves) / Use scissors for cutting<br>2. Use proper PPE (safety glasses)<br>3. Be aware of hands/fingers during hammering / Wear proper PPE (leather gloves) |
| 115. All activities | 136. Slips/ Trips/ Falls<br>137. Hand injuries, cuts, or lacerations during manual handling of materials<br>138. Foot injuries<br>139. Back injuries<br>140. Traffic<br>141. Wildlife: Stray dogs, Mice/rats, Vectors (i.e. mosquitoes, bees, etc.)<br>142. High Noise levels<br>143. Overhead hazards<br>144. Heat Stress/ Cold Stress<br>145. Eye Injuries | 142. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards<br>143. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery or dirty objects before handling / Wear leather/ cut-resistant gloves<br>144. Wear Langan approved safety shoes<br>145. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible<br>146. Wear high visibility clothing & vest / Use cones or signs to designate work area<br>147. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed<br>148. Wear hearing protection<br>149. Wear hard hat / Avoid areas were overhead hazards exist. |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | | 150. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress<br>151. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

| Print Name | Sign Name | Date |
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# LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title:** **Test Pits**
**JSA Number:** **JSA016-01**

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last Minute Risk Assessment.**




**S – *Stop,* what has changed?**
**T – *Think* about the task**
**E – *Evaluate* potential hazards**
**P – *Plan* safe approach**
**S - *Start* task / *Stop* & regroup**

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☐ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☐ Other: | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 116. Transport equipment to work area | 57. Back Strain<br>58. Slips/ Trips/ Falls<br>59. Traffic<br>60. Cuts/abrasions from equipment<br>61. Contusions from dropped equipment | 18. Use proper lifting techniques / Use wheeled transport<br>19. Minimize distance to work area / Have unobstructed path to work area / Follow good housekeeping procedures<br>20. Wear proper PPE (high visibility vest or clothing)<br>21. Wear proper PPE (leather gloves, long sleeves)<br>22. Wear proper PPE (safety shoes) |
| 117. Digging Test Pit | 55. Back Strain<br>56. Unstable walls of excavation | 25. Observe proper digging technique. Ensure spoil pile and equipment are at least 2 feet from edge of excavation.<br>26. Excavate test pit in a stepped manor. |
| 118. All activities | 146. Slips/ Trips/ Falls<br>147. Hand injuries, cuts, or lacerations during manual handling of materials<br>148. Foot injuries<br>149. Back injuries<br>150. Traffic<br>151. Wildlife: Stray dogs, Mice/rats, Vectors (i.e. mosquitoes, bees, etc.)<br>152. High Noise levels<br>153. Overhead hazards<br>154. Heat Stress/ Cold Stress<br>155. Eye Injuries | 152. Be aware of potential trip hazards / Follow good housekeeping procedures/ Mark significant hazards<br>153. Inspect for jagged/sharp edges, and rough or slippery surfaces / Keep fingers away from pinch points / Wipe off greasy, wet, slippery or dirty objects before handling / Wear leather/ cut-resistant gloves<br>154. Wear Langan approved safety shoes<br>155. Use proper lifting techniques / Consider load location, task repetition, and load weigh when evaluating what is safe or unsafe to lift / Obtain assistance when possible<br>156. Wear high visibility clothing & vest / Use cones or signs to designate work area<br>157. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs / Carry/use dog/animal repellant / Use bug spray when needed. |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 3. All activities (cont'd) | | 158. Wear hearing protection<br>159. Wear hard hat / Avoid areas where overhead hazards exist.<br>160. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather) / Drink plenty of fluids to avoid dehydration / Takes breaks as necessary to avoid heat/cold stress.<br>161. Wear safety glasses |
| Additional items. | | |
| Additional Items identified while in the field.<br><br>(Delete row if not needed.) | | |

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# LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title: Sampling from Open Pit**
**JSA Number: JSA068**

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last Minute Risk Assessment.**




**S – *Stop,* what has changed?**
**T – *Think* about the task**
**E – *Evaluate* potential hazards**
**P – *Plan* safe approach**
**S - *Start* task / *Stop* & regroup**

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☐ Hearing Protection |
| ☒ Safety Glasses | ☐ Safety Goggles | ☐ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☒ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☐ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☐ Other: | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 119. Transport equipment to work area | 62. Back strains<br>63. Slips/Trips/ Falls<br>64. Traffic<br>65. Cuts/Abrasions/Contusions from equipment<br>66. Driving terrain/road hazards | 38. Use proper lifting techniques/Use wheeled transport<br>39. Minimize distance to work area/ Have unobstructed path to work area/ Follow good housekeeping procedures.<br>40. Wear proper PPE (high-visibilty vest or clothing)<br>41. Wear proper PPE (leather gloves, long sleeves, Langan approved safety shoes)<br>42. Safety belts/ Be aware of road and weather conditions/watch when exiting vehicle |
| 120. Walk from vehicle to sample locations | 57. Slips/Trips/Falls<br>58. Back strains | 36. Minimize distance to work area/ have unobstructed path to work area/ Follow good housekeeping procedures/ Locate safest access point/ Mark significant hazards with spray paint or cones/ Carry equipment in a way that it allows you to see walking path.<br>37. Use proper lifting techniques/Use wheeled transport/ Obtain assistance when needed |
| 121. Excavation | 46. Excavation collapse<br>47. Confined space<br>48. Soil | 21. Use proper shoring/benching/sloping techniques; Ladder is properly situated in excavation; no water in excavation; competent person has inspected excavation prior to allow employees to enter.<br>22. Langan employees are not authorized to enter a confined space;<br>23. Soil and equipment are kept at least 2 feet from edge of excavation |
| 122. Surface Water Sampling | 1. Contaminated media. Skin/eye contact with biological agents and/or chemicals. | 1. Wear appropriate PPE (Safety glasses, appropriate gloves). Review SDS for all chemicals present. |
| 123. Sample Collection (Water) | 1. Drowning Hazards | 1. Use buddy system/ Wear flotation vest if water is deeper than 2 feet or swift moving/ Select working area with stable footing/ Do not attempt to |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| | 2. Chemical burns (when adding acid preservative to sample)<br>3. Back Strains<br>4. Ergonomic issues<br>5. Slip/Trips/Falls | cross or stand in swift moving water. Ensure fall protection harness is secure and working properly.<br>2. Wear proper PPE (Nitrile gloves, Tyvek Sleeves)<br>3. Do not over-tighten bottle caps / Handle bottles safely to avoid breakage / Wrap glass bottles in bubble wrap, if possible<br>4. Use proper lifting techniques/ Use wheeled transport/ Obtain assistance where and when needed/ Consider load weight when evaluating what is safe or unsafe to carry.<br>5. When possible, avoid bending over for long periods of time/ Use a small stool for sitting or knee pad for kneeling.<br>6. Minimize distance to sample area/ Plan route and check surface prior to carrying heavy equipment/ Locate safest access point/ Follow good housekeeping procedures/ Mark significant below grade hazards (holes, trenches) with spray paint or cones/ Wear foot protection with ankle support and gripping soles/ Avoid standing water or slippery terrain. |
| 124. Icing of Samples & Transporting coolers/equipment from work area. | 5. Back Strains<br>6. Slips/Trips/Falls<br>7. Cuts/Abrasions from equipment<br>8. Pinch/Crushing Hazards.<br>6. | 5. Drain coolers of water. Use proper lifting techniques. Use wheeled transport whenever possible;<br>6. Plan for and utilize a safe and unobstructed path of travel to and from work area. Maintain situational awareness when traveling to and from work area;<br>7. Wear proper PPE (Leather gloves, long sleeves);<br>7. Wear proper PPE (Leather gloves, long sleeves, hard hat, Langan approved safety shoes). |
| 125. All activities | 156. Slips/ Trips/ Falls<br>157. Hand injuries, cuts or lacerations during manual handling of materials<br>158. Foot injuries<br>159. Back injuries<br>160. Traffic<br>161. Wildlife: Stray dogs, Mice/rats, Vectors (i.e. mosquitoes, bees, etc.)<br>162. High Noise levels<br>163. Overhead hazards<br>164. Heat Stress/ Cold Stress<br>165. Eye Injuries | 162. Be aware of potential trip hazards/ Follow good housekeeping procedures/ Mark significant hazards<br>163. Inspect for jagged/sharp edges, and rough or slippery surfaces/ Keep fingers away from pinch points/ Wipe off greasy, wet, slippery or dirty objects before handling/ Wear leather/ Cut-resistant gloves<br>164. Wear proper PPE (Langan approved safety shoes).<br>165. Use proper lifting techniques/ Consider load location, task repetition, and load weight when evaluating what is safe or unsafe to lift/ Obtain assistance when possible.<br>166. Wear high visibility clothing & vest/ Use cones or signs to designate work area<br>167. Be aware of surroundings at all times, including the presence of wildlife/ Do not approach stray dogs/ Carry and use animal repellant when needed/ Use bug spray when needed<br>168. Wear proper PPE (hearing protection)<br>169. Wear hard hat/ Avoid areas were overhead hazards exist.<br>170. Wear proper attire for weather conditions (sunscreen or protective clothing in sunlight, layers for cold weather)/ Drink plenty of fluids to avoid dehydration/ Takes breaks as necessary to avoid heat/cold stress<br>171. Wear proper PPE (safety glasses) |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| Additional items. | | |
| Additional Items identified while in the field. | | |

| Print Name | Sign Name | Date |
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LANGAN

**Job Safety Analysis (JSA)**
**Health and Safety**

**JSA Title: Soft Dig - Air Knife, Vac Truck, Slide Hammer, Hand Auger and Borehole Triangulation**
**JSA Number: JSA073**

**A Job Safety Analysis (JSA) must identify all job steps required to complete the task, the potential hazards employees could be exposed to while performing the job step and the preventative/corrective actions required to reduce/mitigate the identified potential hazards. Employees must certify that they have either prepared the JSA or have reviewed the JSA and are aware of the potential hazards associated with this task and will follow the provided preventive/corrective actions. Prior to the start of any work "TAKE 5" and conduct a Last Minute Risk Assessment.**




S – ***Stop,*** *what has changed?*
T – ***Think*** *about the task*
E – ***Evaluate*** *potential hazards*
P – ***Plan*** *safe approach*
S - ***Start*** *task /* ***Stop*** *& regroup*

| **PERSONAL PROTECTIVE EQUIPMENT (Required or to be worn as needed):** | | | | |
|---|---|---|---|---|
| ☒ Safety Shoes | ☒ Long Sleeves | ☒ Safety Vest (Class 2) | ☒ Hard Hat | ☒ Hearing Protection |
| ☒ Safety Glasses | ☒ Safety Goggles | ☒ Face Shield | ☒ Nitrile Gloves | ☐ PVC Gloves |
| ☒ Leather Gloves | ☐ Cut Resist. Gloves | ☐ Fall Protection | ☐ Fire Resistant Clothing | ☐ Rubber Boots |
| ☐ Insect/Animal Repellent | ☐ Ivy Blocker/Cleaner | ☒ Traffic Cones/Signs | ☐ Life Vest/Jacket | |
| ☒ Other: Half-face respirator, dust cartridges, and PID (if applicable) | | | | |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 126. Pre-work safety meeting | 67. Improper communication | 43. Ensure all paperwork is ready for project<br>44. Ensure all personnel have read and understand the work plan, reviewed HASP, and applicable JSAs |
| 127. Equipment Preparation | 59. Slips/ Trips/ Falls<br>60. Physical hazards including strains and hand injury<br>61. Traffic | 1. Be alert / Follow good housekeeping procedures<br>2. Use proper lifting techniques / Do not lift heavy loads without assitance / Avoid putting hands near pinch points / Wear proper PPE (leather gloves).<br>3. Use cones, signs, flags or other traffic control devices |
| 3. Air Knife | 49. Motion – Heavy Equipment Movement<br>50. High noise levels<br>51. Airborne particles and debris<br>52. Impact to subsurface lines | 24. Do not allow personnel to stand within the swing radius of equipment, arms/booms, when equipment is in use; Stay clear of operating equipment when in motion; When approaching equipment, approach should be made from the front ensuring eye contact is made with operator.<br>25. Wear hearing protection required when working around operating equipment if levels are suspected to be >85 dBA<br>26. Use water as necessary to control dust in area; Use containment unit to contain particles and dust; PPE to include face shield or safety glasses with side shields, dust mask.<br>27. Verify underground features have been marked and points are 5' or greater from identified features; Ensure excavation is approved by competent person |

| JOB STEPS | POTENTIAL HAZARDS | PREVENTATIVE / CORRECTIVE ACTION |
|---|---|---|
| 4. Vaccuum Truck Extraction | 1. Pre-truck inspection<br>2. High noise levels<br>3. Physical hazards including back strain and hand injury | 1. Inspect the vehicle and all associated equipment prior to operating the vaccuum. Ensure all hoses and connections are properly secured.<br>2. Wear hearing protection required when working around operating equipment if levels are suspected to be >85 dBA<br>3. Hold Vacuum hose using arms and shoulders. Do not over exert, keep back in neutral position, bend at knees. Request assistance when needed. Ensure proper PPE is worn at all times, including a face shield. |
| 5. Slide Hammer | 1. Physical hazards including back strain and Hand or eye injury<br>2. Impact to subsurface lines | 1. Hold slide hammer using arms and shoulders. Apply force to slide hammer without over exerting. Keep away from slide hammer recoil. Keep back in neutral position and bend at the knees. Request assistance when needed. Ensure proper PPE is worn at all times, including eye glasses with side shields.<br>2. Verify underground features have been marked and points are 5' or greater from identified features; Ensure excavation is approved by competent person |
| 6. Hand Auger and/or Shovel (if applicable) | 172. Physical hazards including back strain and hand injury | 1. Twist hand auger using arms and shoulders. Operate shovel using arms and legs. Do not over exert, Keep back in neutral position, bend at the knees. Request assistance when needed. Remove auger or shovel from ground keeping back in neutral position and lift using legs. |
| 7. Borehole Triangulation (using any combination of the aforementioned job steps, as needed) | 1. Inconclusive subsurface utility line clearance | 1. Verify underground features have been marked and points are 5' or greater from identified features; Ensure excavation is approved by competent person |
| Additional items. | | |

| Print Name | Sign Name | Date |
|---|---|---|
| ***Prepared by:*** | | |
| | | |
| | | |
| | | |
| ***Reviewed by:*** | | |
| Ken Bloom | | 9/24/2025 |
| | | |
| | | |
| | | |
| | | |

# ATTACHMENT H

# TAILGATE SAFETY BRIEFING FORM

# LANGAN TAILGATE SAFETY BRIEFING

Date:_____ Time: _____

Leader:_____ Location:_____

Work Task:

_____

_____

**SAFETY TOPICS (*provide some detail of discussion points*)**

Chemical Exposure Hazards and Control:_____

_____

Physical Hazards and Control: _____

Air Monitoring: _____

PPE: _____

_____

Communications:_____

Safe Work Practices: _____

_____

Emergency Response: _____

Hospital/Medical Center Location: _____

Phone Nos.: _____

Other: _____

**FOR FOLLOW-UP** (the issues, responsibilities, due dates, etc.**)**

_____

_____

_____

**ATTENDEES**

| PRINT NAME | COMPANY | SIGNATURE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

# APPENDIX C

# QUALITY ASSURANCE PROJECT PLAN

DRAFT

# QUALITY ASSURANCE PROJECT PLAN

# for

# 13 Culver Street and 372 Riverdale Avenue
# Yonkers, New York 10705

***Prepared For:***

**Claudius Development LLC**
**600 Third Avenue, 18th Floor**
**New York, NY 10016**

***Prepared by:***

**Langan Engineering, Environmental, Surveying,**
**Landscape Architecture and Geology, D.P.C.**
**368 Ninth Avenue, 8th Floor**
**New York, New York 10001**

**28 May 2026**
**Langan Project No. 19014301**

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Attachment B: Laboratory Reporting Limits and Method Detection Limits
Attachment C: Analytical Methods/Quality Assurance Summary Table
Attachment D: Sample Nomenclature
Attachment E: PFAS Sampling SOP

# 1.0 PROJECT DESCRIPTION

## 1.1 INTRODUCTION

This Quality Assurance Project Plan (QAPP) was prepared on behalf of Claudius Development LLC (the Applicant), for the property located at 13 Culver Street and 372 Riverdale Avenue in Yonkers, New York (the site). This QAPP supports the Remedial Investigation Work Plan (RIWP) submitted to the New York State Department of Environmental Conservation (NYSDEC) to provide sufficient information for evaluation of remedial alternatives and development of a conceptual site model.

This QAPP specifies analytical methods to be used to ensure that data collected during the Remedial Investigation (RI) are precise, accurate, representative, comparable, complete, and meet the sensitivity requirements of the project.

## 1.2 PROJECT OBJECTIVES

The objective of the RI is to investigate and characterize the nature and extent of environmental impacts at and emanating from the site and to provide sufficient information for evaluation of remedial alternatives and development of a conceptual site model. This QAPP addresses sampling and analytical methods that may be necessary in support of the RIWP. These objectives have been established in order to meet standards that will protect public health and the environment.

## 1.3 SCOPE OF WORK

The scope of work covered in this QAPP is detailed in the RIWP. In general, the RIWP proposes soil boring installation and sampling, groundwater monitoring well installation and sampling, and soil vapor point and sub-slab vapor point installation and sampling.

The following investigation activities will be performed as part of the RIWP:

3.1 Geophysical Survey

- Completion of a site-wide geophysical survey to clear sample locations and identify potential subsurface utilities and structures, including USTs. Sample locations may be relocated as necessary, based on the findings of the geophysical survey and other available utility information.

Soil Boring Advancement and Sampling

- Advancement of 14 soil borings throughout the site to about 20 feet below sidewalk grade (bsg) with a track-mounted direct push drill rig. Soil borings to be converted to groundwater monitoring wells will be advanced to at least 5 feet below the observed groundwater interface.

- Collection of up to three samples from each of the 14 soil borings (plus quality assurance/quality control [QA/QC] samples) for laboratory analysis. Samples for laboratory analysis will be collected from within non-native fill, terminus of fill, and at the groundwater interface. If petroleum-like impacts are observed, additional samples may be collected.

Monitoring Well Installation and Sampling

- Installation of 11 groundwater monitoring wells.
- Development of groundwater monitoring wells by surging and pumping upon installation.
- Collection of one groundwater sample from each monitoring well (plus quality assurance/quality control [QA/QC] samples) for laboratory analysis.
- Surveying and gauging the monitoring wells to measure groundwater elevation and evaluate flow direction.

Soil Vapor Sampling

- Installation of seven sub-surface soil vapor points to about 5 feet bsg or 2 feet above groundwater (whichever is shallower).
- Installation of two sub-slab vapor points immediately below the cellar slab.
- Collection of two indoor air samples co-located with the sub-slab vapor point locations.
- Collection of one outdoor ambient air sample.

## 2.0 DATA QUALITY OBJECTIVES AND PROCESS

Data Quality Objectives (DQO) are qualitative and quantitative statements to help ensure that data of known and appropriate quality are obtained during the project. The overall objective is to investigate subsurface conditions at and emanating from the site and to provide sufficient information for evaluation of remedial alternatives and development of a conceptual site model.

The DQO process is an iterative process where various options for implementing a project are explored, dissected, and recombined. The feasibility and costs of various options are estimated, and then the most advantageous option is selected and developed into project work plans that will be implemented.

DQOs for sampling activities are determined by evaluating five factors:

- Data needs and uses: The types of data required and how the data will be used after it is obtained.
- Parameters of Interest: The types of chemical or physical parameters required for the intended use.
- Level of Concern: Levels of constituents, which may require remedial actions or further investigations, based on comparison to Title 6 of the Official Compilation of New York Codes, Rules and Regulations Part 375 NYSDEC Restricted-Use Restricted Residential (RURR) Soil Cleanup Objectives (SCOs) for soil samples, the NYSDEC Standards, Guidance Values, and Guidance Memoranda (SGVs) for Class GA groundwater for groundwater samples, and to the October 2006 (updated in May 2017) NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York Air Guideline Values and Decision Matrices for soil vapor samples.
- Required Analytical Level: The level of data quality, data precision, and QA/QC documentation required for chemical analysis.
- Required Detection Limits: The detection limits necessary based on the above information.

The investigation will be evaluated using the DQO process on an individual, task-specific basis. DQOs and the required level of review will be determined during this process.

The quality assurance and quality control objectives for all measurement data include:

- **Precision** – an expression of the reproducibility of measurements of the same parameter under a given set of conditions. Field sampling precision will be

determined by analyzing field duplicate samples and analytical precision will be determined by analyzing laboratory duplicates, laboratory control sample duplicates, and/or matrix spike duplicates.

- **Accuracy** – a measure of the degree of agreement of a measured value with the true or expected value of the quantity of concern. For soil and groundwater samples, accuracy will be determined through the assessment of the analytical results of field blanks and trip blanks for each sample set. Analytical accuracy will be assessed by examining the percent recoveries of surrogate compounds that are added to each sample (organic analyses only), internal standards, laboratory method blanks, instrument calibration, and the percent recoveries of matrix spike compounds added to selected samples and laboratory blanks. For soil vapor or air samples, analytical accuracy will be assessed by examining the percent recoveries that are added to each sample, internal standards, laboratory method blanks, and instrument calibration.
- **Representativeness** – expresses the degree to which sample data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is dependent upon the adequate design of the sampling program and will be satisfied by ensuring that the scope of work is followed and that specified sampling and analysis techniques are used. Representativeness in the laboratory is ensured by compliance to nationally-recognized analytical methods, meeting sample holding times, and maintaining sample integrity while the samples are in the laboratory's possession. This is accomplished by following all applicable methods, laboratory-issued standard operating procedures (SOP), the laboratory's Quality Assurance Manual, and this QAPP. The laboratory is required to be properly certified and accredited.
- **Completeness** – the percentage of measurements made which are judged to be valid. Completeness will be assessed through data validation. The QC objective for completeness is generation of valid data for at least 90 percent of the analyses requested.
- **Comparability** – expresses the degree of confidence with which one data set can be compared to another. The comparability of all data collected for this project will be ensured using several procedures, including standard methods for sampling and analysis as documented in the QAPP, using standard reporting units and reporting formats, and data validation.

- **Sensitivity** – the ability of the instrument or method to detect target analytes at the levels of interest. The project manager will select, with input from the laboratory and QA personnel, sampling and analytical procedures that achieve the required levels of detection.

## 3.0 PROJECT ORGANIZATION

Investigation activities will be overseen by Langan on behalf of the Applicant. Langan will perform the sampling collection as described in the RIWP and will subcontract drilling and analytical services. Langan will also arrange data analysis and reporting tasks. The analytical services will be performed by an NYSDOH Environmental Laboratory Accreditation Program (ELAP) certified laboratory. Data validation services will be performed by Joe Conboy of Langan.

Key contacts for this project are as follows:

| | |
|---|---|
| Claudius Development LLC: | Mr. John Saraceno |
| Qualified Environmental Professional (QEP), and Langan Quality Assurance Officer (QAO): | Mr. Robert Kovacs, PE<br>Telephone: (934) 237-1319 |
| Langan Project Manager: | Ms. Emily Butler<br>Telephone: (212) 479-5462 |
| Engineer of Record | Mr. Gerald Nicholls, PE, CHMM<br>Telephone: (212) 479-5559 |
| Langan Field Team Leader: | Mr. Connor Moore<br>Telephone: (212) 479-5512 |
| Langan Health and Safety Manager: | Mr. Tony Moffa, CHMM, COS, CSP<br>Telephone: (215) 491-6500 |
| Langan Health and Safety Officer (H&SO): | Mr. Bill Bohrer, PG<br>Telephone: (410) 984-3068 |
| Data Validator: | Mr. Joe Conboy<br>Telephone: (602) 790-6052 |
| Laboratory Representative: | TBD |
| Field Personnel: | TBD |

Résumés are included in Attachment A of this QAPP.

## 4.0 QUALITY ASSURANCE OBJECTIVES FOR COLLECTION OF DATA

The overall quality assurance objective is to develop and implement procedures for sampling, laboratory analysis, field measurements, and reporting that will provide data of sufficient quality to evaluate the subsurface conditions on the site. The sample set, chemical analysis results, and interpretations must be based on data that meet or exceed quality assurance objectives established for the site. Quality assurance objectives are usually expressed in terms of accuracy or bias, sensitivity, completeness, representativeness, comparability, and sensitivity of analysis. Variances from the quality assurance objectives at any stage of the investigation will result in the implementation of appropriate corrective measures and an assessment of the impact of corrective measures on the usability of the data.

### 4.1 PRECISION

Precision is a measure of the degree to which two or more measurements are in agreement. Field precision is assessed through the collection and measurement of field duplicates. Laboratory precision and sample heterogeneity also contribute to the uncertainty of field duplicate measurements. This uncertainty is taken into account during the data assessment process. For field duplicates, results less than 5x the reporting limit (RL) meet the precision criteria if the absolute difference is less than ±2x the RL for soils (and ±1x the RL for water) and acceptable based on professional judgement. For results greater than 2x the RL for soils (and 1x the RL for water), the acceptance criteria is a relative percent difference (RPD) of ≤50% (soil), <30% (water and air). RLs and method detection limits (MDL) are provided in Attachment B.

Laboratory precision is assessed through the analysis of matrix spike/matrix spike duplicates (MS/MSD), laboratory control sample/laboratory control sample duplicates (LCS/LCSD) and subsequent calculation of RPD. For outliers, if additional sample volume is present, the MS/MSD should be reanalyzed and the RPD recomputed. If additional volume is not present, an evaluation will be performed to determine the extent of potential matrix interference.

### 4.2 ACCURACY

Accuracy is the measurement of the reproducibility of the sampling and analytical methodology. It should be noted that precise data may not be accurate data. For the purpose of this QAPP, bias is defined as the constant or systematic distortion of a measurement process, which manifests itself as a persistent positive or negative deviation from the known or true value. This may be due to (but not limited to) improper sample collection, sample matrix, poorly calibrated analytical or sampling equipment, or limitations or errors in analytical methods and techniques.

Accuracy in the field is assessed through the use of field and trip blanks and through compliance to all sample handling, preservation, and holding time requirements. All field and trip blanks should be non-detect when analyzed by the laboratory. Any contaminant detected in an associated field blank will be evaluated against laboratory blanks (preparation or method) and evaluated against field samples collected on the same day to determine potential for bias.

Laboratory accuracy is assessed by evaluating the percent recoveries of MS/MSD samples, LCS/LCSD, surrogate compound recoveries, internal standard area counts, initial and continuing calibration, and the results of method, initial and continuing calibration blanks. MS/MSD, LCS/LCSD, and surrogate percent recoveries will be compared to either method-specific control limits or laboratory-derived control limits. Sample volume permitting, samples displaying outliers should be reanalyzed. All associated method blanks should be non-detect when analyzed by the laboratory.

## 4.3 COMPLETENESS

Laboratory completeness is the ratio of total number of samples analyzed and verified as acceptable compared to the number of samples submitted to the fixed-base laboratory for analysis, expressed as a percent. Three measures of completeness are defined:

- Sampling completeness, defined as the number of valid samples collected relative to the number of samples planned for collection;
- Analytical completeness, defined as the number of valid sample measurements relative to the number of valid samples collected; and
- Overall completeness, defined as the number of valid sample measurements relative to the number of samples planned for collection.

Soil and groundwater data will meet a 90% completeness criterion. If the criterion is not met, sample results will be evaluated for trends in rejected and unusable data. The effect of unusable data required for a determination of compliance will also be evaluated.

## 4.4 REPRESENTATIVENESS

Representativeness expresses the degree to which data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition within a defined spatial and/or temporal boundary. Representativeness is dependent upon the adequate design of the sampling program and will be satisfied by ensuring that the scope of work is followed and that specified sampling and analysis techniques are used. This is performed by following applicable SOPs and this QAPP. All field technicians will be given copies of appropriate

documents prior to sampling events and are required to read, understand, and follow each document as it pertains to the tasks at hand.

Representativeness in the laboratory is ensured by compliance to nationally-recognized analytical methods, meeting sample holding times, and maintaining sample integrity while the samples are in the laboratory's possession. This is performed by following all applicable methods, laboratory-issued SOPs, the laboratory's Quality Assurance Manual, and this QAPP. The laboratory is required to be properly certified and accredited.

## 4.5 COMPARABILITY

Comparability is an expression of the confidence with which one data set can be compared to another. Comparability is dependent upon the proper design of the sampling program and will be satisfied by ensuring that the sampling plan is followed and that sampling is performed according to the SOPs or other project-specific procedures. Analytical data will be comparable when similar sampling and analytical methods are used as documented in the QAPP. Comparability will be controlled by requiring the use of specific nationally-recognized analytical methods and requiring consistent method performance criteria. Comparability is also dependent on similar quality assurance objectives. Previously collected data will be evaluated to determine whether they may be combined with contemporary data sets.

## 4.6 SENSITIVITY

Sensitivity is the ability of the instrument or method to detect target analytes at the levels of interest. The project director will select, with input from the laboratory and QA personnel, sampling and analytical procedures that achieve the required levels of detection and QC acceptance limits that meet established performance criteria. Concurrently, the project manager will select the level of data assessment to ensure that only data meeting the project DQOs are used in decision-making.

Field equipment will be used that can achieve the required levels of detection for analytical measurements in the field. In addition, the field sampling staff will collect and submit full volumes of samples as required by the laboratory for analysis, whenever possible. Full volume aliquots will help ensure achievement of the required limits of detection and allow for reanalysis if necessary. The concentration of the lowest level check standard in a multi-point calibration curve will represent the reporting limit.

Analytical methods and quality assurance parameters associated with the sampling program are presented in Attachment C. The frequency of associated field blanks, trip blanks and field duplicate samples will be based on the recommendations listed in DER-10, and as described in Section 5.3.

Site-specific MS and MSD samples will be prepared and analyzed by the analytical laboratory by spiking an aliquot of submitted sample volume with analytes of interest. Additional sample volume is not required by the laboratory for this purpose. An MS/MSD analysis will be analyzed at a rate of 1 out of every 20 samples, or one per analytical batch. MS/MSD samples are only required for soil and groundwater samples.

## 5.0 SAMPLE COLLECTION AND FIELD DATA ACQUISITION PROCEDURES

Soil and groundwater sampling will be conducted in accordance with the established NYSDEC protocols contained in DER-10/Technical Guidance for Site Investigation and Remediation (May 2010). Soil vapor sampling will be conducted in accordance with the established NYSDOH protocols contained in the Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006). The following sections describe procedures to be followed for specific tasks.

## 5.1 FIELD DOCUMENTATION PROCEDURES

Field documentation procedures will include summarizing field data in field books and field data sheets, and proper sample labeling. These procedures are described in the following sections.

### 5.1.1 Field Data and Notes

Field notebooks contain the documentary evidence regarding procedures conducted by field personnel. Hard cover, bound field notebooks will be used because of their compact size, durability, and secure page binding. The pages of the notebook will not be removed.

Entries will be made in waterproof, permanent blue or black ink. No erasures will be allowed. If an incorrect entry is made, the information will be crossed out with a single strike mark and the change initialed and dated by the team member making the change. Each entry will be dated. Entries will be legible and contain accurate and complete documentation of the individual or sampling team's activities or observations made. The level of detail will be sufficient to explain and reconstruct the activity conducted. Each entry will be signed by the person(s) making the entry.

The following types of information will be provided for each sampling task, as appropriate:

- Project name and number
- Reasons for being on-site or taking the sample
- Date and time of activity
- Sample identification numbers
- Geographical location of sampling points with references to the site, other facilities or a map coordinate system. Sketches will be made in the field logbook when appropriate
- Physical location of sampling locations such as depth below ground surface
- Description of the method of sampling including procedures followed, equipment used and any departure from the specified procedures

- Description of the sample including physical characteristics, odor, etc.
- Readings obtained from health and safety equipment
- Weather conditions at the time of sampling and previous meteorological events that may affect the representative nature of a sample
- Photographic information including a brief description of what was photographed, the date and time, the compass direction of the picture and the number of the picture on the camera
- Other pertinent observations such as the presence of other persons on the site, actions by others that may affect performance of site tasks, etc.
- Names of sampling personnel and signature of persons making entries

Field records will also be collected on field data sheets including boring logs, which will be used for geologic and drilling data during soil boring activities. Field data sheets will include the project-specific number and stored in the field project files when not in use. At the completion of the field activities, the field data sheets will be maintained in the central project file.

### 5.1.2 Sample Labeling

Each sample collected will be assigned a unique identification number in accordance with the sample nomenclature guidance included in Attachment D, and placed in an appropriate sample container. Each sample container will have a sample label affixed to the outside with the date and time of sample collection and project name. In addition, the label will contain the sample identification number, analysis required and chemical preservatives added, if any. All documentation will be completed in waterproof ink.

## 5.2 EQUIPMENT CALIBRATION AND PREVENTATIVE MAINTENANCE

A photoionization detector (PID) will be used during the sampling activities to evaluate work zone action levels, collect pre- and post-sample readings for air samples, screen soil samples, and collect monitoring well headspace readings. Field calibration and/or field checking of the PID will be the responsibility of the field team leader and the site H&SO, and will be accomplished by following the procedures outlined in the operating manual for the instrument. At a minimum, field calibration and/or field equipment checking will be performed once daily, prior to use. Field calibration will be documented in the field notebook. Entries made into the logbook regarding the status of field equipment will include the following information:

- Date and time of calibration
- Type of equipment serviced and identification number (such as serial number)

- Reference standard used for calibration
- Calibration and/or maintenance procedure used
- Other pertinent information

A water quality meter (YSI 6820 or similar) will be used during purging of groundwater to measure pH, specific conductance, temperature, dissolved oxygen, turbidity and oxidation-reduction-potential (ORP), every five minutes. A portable turbidity meter (LaMotte or similar) may also be used to measure turbidity. Water-quality meters should be calibrated and the results documented before use each day using standardized field calibration procedures and calibration checks.

Equipment that fails calibration or becomes inoperable during use will be removed from service and segregated to prevent inadvertent utilization. The equipment will be properly tagged to indicate that it is out of calibration. Such equipment will be repaired and recalibrated to the manufacturer's specifications by qualified personnel. Equipment that cannot be repaired will be replaced.

Off-site calibration and maintenance of field instruments will be conducted as appropriate throughout the duration of project activities. All field instrumentation, sampling equipment and accessories will be maintained in accordance with the manufacturer's recommendations and specifications and established field equipment practice. Off-site calibration and maintenance will be performed by qualified personnel. A logbook will be kept to document that established calibration and maintenance procedures have been followed. Documentation will include both scheduled and unscheduled maintenance.

## 5.3 SAMPLE COLLECTION

*Soil Samples*

Soil samples will be visually classified and field screened using a PID to assess potential impacts from volatile organic compounds (VOC) and for health and safety monitoring. Soil samples collected for analysis of VOCs will be collected using either EnCore® or Terra Core® sampling equipment. For analysis of non-volatile parameters, samples will be homogenized and placed into glass jars.

Soil sampling for per- and polyfluoroalkyl substances (PFAS) will be conducted in accordance with United States Environmental Protection Agency (USEPA) Draft Method 1633 Field Sampling Guidelines. PFAS samples will be collected first in High Density Polyethylene (HDPE)/polypropylene containers using sampling equipment either made with stainless steel, HDPE, or polypropylene. Food and beverages will be prohibited near the sampling equipment. Additionally, no cosmetics, moisturizers, hand cream, sun

screen or clothing materials containing Gore-Tex™ or Tyvek® will be worn during sampling.

Soil samples will be analyzed for PFAS by USEPA Draft Method 1633 Modified and 1,4-dioxane by USEPA Method 8270 selective ion monitoring (SIM). Both methods listed above will be able to meet the reporting limits for PFAS (0.5 microgram per kilogram [µg/kg]) and 1,4-dioxane (0.1 milligram per kilogram [mg/kg]) in soil.

After collection, sample jars will be capped and securely tightened, and placed in iced coolers and maintained at 4°C ±2°C until they are transferred to the laboratory for analysis, in accordance with the procedures outlined in Section 5.4 and 5.6. Analysis and/or extraction and digestion of collected soil samples will meet the holding times required for each analyte as specified in Attachment C. In addition, analysis of collected soil samples will meet all quality assurance criteria set forth by this QAPP and DER-10.

*Groundwater Samples*

Groundwater sampling will be conducted using low-flow sampling procedures following USEPA guidance ("Low Stress [low flow] Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells", EQASOP-GW4, dated July 30, 1996, revised September 19, 2017).

During purging, field parameters should be measured, including: water level drawdown, purge rate, pH, specific conductance, temperature, dissolved oxygen, turbidity and ORP, every five minutes using a water quality meter (YSI 6820 or similar) and a depth-to-water interface probe that should be decontaminated between wells. Samples should generally not be collected until the field parameters have stabilized. Field parameters will be considered stable once three sets of measurements are within ±0.1 standard units for pH, ±3% for conductivity and temperature, ±10 millivolts for ORP, and ±10% for turbidity and dissolved oxygen. Purge rates should be adjusted to keep the drawdown in the well to less than 0.3 feet, as practical. Additionally, an attempt should be made to achieve a stable turbidity reading of less than 5 Nephelometric Turbidity Units (NTU) prior to sampling. If the turbidity reading does not stabilize at a reading of less than 5 NTU for a given well, then both filtered and unfiltered samples should be collected from that well. If necessary, field filtration should be performed using a 0.45 micron disposable in-line filter. Groundwater samples should be collected after parameters have stabilized as noted above or the readings are within the precision of the meter. Deviations from the stabilization and drawdown criteria, if any, should be noted on the sampling logs.

Groundwater sampling for PFAS and 1,4-dioxane will be performed in accordance with the NYSDEC-approved Groundwater Monitoring Plan, dated August 27, 2004, which specifies purging three to five well volumes prior to sample collection. The pump will be

decontaminated with Alconox and water. Field personnel will wear nitrile gloves while collecting and handing groundwater samples.

Groundwater sampling for PFAS will be conducted in accordance with EPA Method 537 Field Sampling Guidelines. PFAS samples will be collected first in HDPE/polypropylene containers using sampling equipment either made with stainless steel, HDPE, or polypropylene. Food and beverages will be prohibited near the sampling equipment. Additionally, no cosmetics, moisturizers, hand cream, sun screen or clothing materials containing Gore-Tex™ or Tyvek® will be worn during sampling.

Groundwater samples will be analyzed for PFAS by USEPA Draft Method 1633 Modified and 1,4-dioxane by USEPA Method 8270 SIM. Both methods listed above will be able to meet the reporting limits for PFAS (2 nanograms per liter [ng/L]) and 1,4-dioxane (0.35 micrograms per liter [µg/L]) in groundwater.

Samples should be collected directly into laboratory-supplied jars. After collection, all sample jars will be capped and securely tightened, and placed in iced coolers and maintained at 4°C ±2°C until they are transferred to the laboratory for analysis, in accordance with the procedures outlined in Section 5.4 and 5.6. Analysis and/or extraction and digestion of collected groundwater samples will meet the holding times required for each analyte as specified in Attachment C. In addition, analysis of collected groundwater samples will meet all quality assurance criteria set forth by this QAPP and DER-10.

A list of the PFAS is provided in Attachment B. Groundwater samples collected for analysis of PFAS will be collected in accordance with the specialized protocols outlined in Attachment E.

*Sample Field Blanks and Field Duplicates*

Field blanks will be collected for quality assurance purposes at a rate of one per 20 investigative samples per matrix (soil and groundwater only). Field blanks will be obtained by pouring laboratory-demonstrated analyte-free water on or through a decontaminated sampling device following use and implementation of decontamination protocols. The water will be collected off of the sampling device into a laboratory-provided sample container for analysis. Field blank samples will be analyzed for the complete list of analytes on the day of sampling. To assess contamination resulting from sample transport, trip blanks will be collected at a rate of one per day if soil samples are analyzed for VOCs during that day. Equipment blanks will be collected at a minimum frequency of one per day per matrix for PFAS.

Field duplicate soil and groundwater samples will be collected and analyzed for quality assurance purposes. Field duplicate samples will be collected at a frequency of 1 per 20

investigative samples per matrix and will be submitted to the laboratory as "blind" samples. If less than 20 samples are collected during a particular sampling event, one field duplicate sample will be collected. Field duplicates will be collected from the same sample volume as the parent sample.

## 5.4 SAMPLE CONTAINERS AND HANDLING

Certified, commercially clean sample containers will be obtained from the analytical laboratory. If soil or groundwater samples are being collected, the laboratory will also prepare and supply the required trip blanks and field blank sample containers and reagent preservatives. Sample bottle containers, including the field blank containers, will be placed into plastic coolers by the laboratory. These coolers will be received by the field sampling team within 24 hours of their preparation in the laboratory. Prior to the commencement of field work, Langan field personnel will fill the plastic coolers with ice in Ziploc® bags (or equivalent) to maintain a temperature of 4° ±2° C.

Soil and/or groundwater samples collected in the field for laboratory analysis will be placed directly into the laboratory-supplied sample containers. Samples will then be placed and stored on ice in laboratory provided coolers until shipment to the laboratory. Blue ice will not be used to cool PFAS samples. The temperature in the coolers containing samples and associated field blanks will be maintained at a temperature of 4°±2°C while on-site and during sample shipment to the analytical laboratory.

Possession of samples collected in the field will be traceable from the time of collection until they are analyzed by the analytical laboratory or are properly disposed. Chain-of-custody procedures, described in Section 5.10, will be followed to maintain and document sample possession. Samples will be packaged and shipped as described in Section 5.7.

## 5.5 SPECIAL CONSIDERATIONS FOR PFAS SAMPLE COLLECTION

The following special considerations apply to the collection of groundwater samples for PFAS analysis to prevent cross-contamination:

- Field equipment will not contain Teflon®
- All sampling material will be made from stainless steel, HDPE, acetate, silicon, or polypropylene
- No waterproof field books will be used
- No plastic clipboards, binders, or spiral hard cover notebooks will be used
- No adhesives will be used
- No sharpies or permanent markers will be used; ball point pens are acceptable

- Aluminum foil will not be used
- PFAS samples will be kept in a separate cooler from other sampling containers
- Coolers will be filled only with regular ice

PFAS compound sampling protocol and the laboratories SOP for PFAS analysis are provided in Attachment E.

## 5.6 SAMPLE PRESERVATION

Sample preservation measures will be used in an attempt to prevent sample decomposition by contamination, degradation, biological transformation, chemical interactions and other factors during the time between sample collection and analysis. Preservation will commence at the time of sample collection and will continue until analyses are performed. Should chemical preservation be required, the analytical laboratory will add the preservatives to the appropriate sample containers before shipment to the office or field. Samples will be preserved according to the requirements of the specific analytical method selected, as shown in Attachment C.

## 5.7 SAMPLE SHIPMENT

### 5.7.1 Packaging

Soil vapor sample canisters can be stored and transported without additional packaging. Soil and groundwater sample containers will be placed in plastic coolers. Ice in Ziploc® bags (or equivalent) will be placed around sample containers. Cushioning material will be added around the sample containers if necessary. Chains-of-custody and other paperwork will be placed in a Ziploc® bag (or equivalent) and placed inside the cooler. The cooler will be taped closed and custody seals will be affixed to one side of the cooler at a minimum. If the samples are being shipped by an express delivery company (e.g. FedEx) then laboratory address labels will be placed on top of the cooler.

### 5.7.2 Shipping

Standard procedures to be followed for shipping environmental samples to the analytical laboratory are outlined below.

- All environmental samples will be transported to the laboratory by a laboratory-provided courier under the chain-of-custody protocols described in Section 5.9.

- Prior notice will be provided to the laboratory regarding when to expect shipped samples. If the number, type or date of shipment changes due to site constraints or program changes, the laboratory will be informed.

## 5.8 DECONTAMINATION PROCEDURES

Decontamination procedures will be used for non-dedicated sampling equipment. Decontamination of field personnel is discussed in the site-specific Health and Safety Plan (HASP) appended to the RIWP. Field sampling equipment that is to be reused will be decontaminated in the field in accordance with the following procedures:

1. Laboratory-grade glassware detergent and tap water scrub to remove visual contamination
2. Generous tap water rinse
3. Distilled/de-ionized water rinse

Any field sampling equipment that is to be reused for PFAS sampling will be decontaminated in the field in accordance with the following procedures:

1. Alconox detergent and "PFAS-free" water scrub to remove visual contamination
2. Generous PFAS-free" water rinse

## 5.9 RESIDUALS MANAGEMENT

Debris (e.g., paper, plastic and disposable personal protective equipment) will be collected in plastic garbage bags and disposed of as non-hazardous industrial waste. Debris is expected to be transported to a local municipal landfill for disposal. If applicable, residual solids (e.g., leftover soil cuttings) will be placed back in the borehole from which it was sampled. If gross contamination is observed, soil will be collected and stored in Department of Transportation (DOT)-approved 55-gallon drums in a designated storage area at the site. All drums will be properly labeled, sealed, and characterized as necessary. The residual materials will be stored in a designated storage area at the site for further characterization, treatment or disposal.

Residual fluids (such as purge water) will be collected and stored in DOT-approved (or equivalent) 55-gallon drums in a designated storage area at the site. The residual fluids will be transported to the on-site wastewater treatment plant or analyzed, characterized and disposed off-site in accordance with applicable federal and state regulations. Residual fluids such as decontamination water may be discharged to the ground surface, however, if gross contamination is observed, the residual fluids will be collected, stored, and transported similar to purge water or other residual fluids.

## 5.10 CHAIN OF CUSTODY PROCEDURES

A chain-of-custody protocol has been established for collected samples that will be followed during sample handling activities in both field and laboratory operations. The

primary purpose of the chain-of-custody procedures is to document the possession of the samples from collection through shipping, storage and analysis to data reporting and disposal. Chain-of-custody refers to actual possession of the samples. Samples are considered to be in custody if they are within sight of the individual responsible for their security or locked in a secure location. Each person who takes possession of the samples, except the shipping courier, is responsible for sample integrity and safe keeping. Chain-of-custody procedures are provided below:

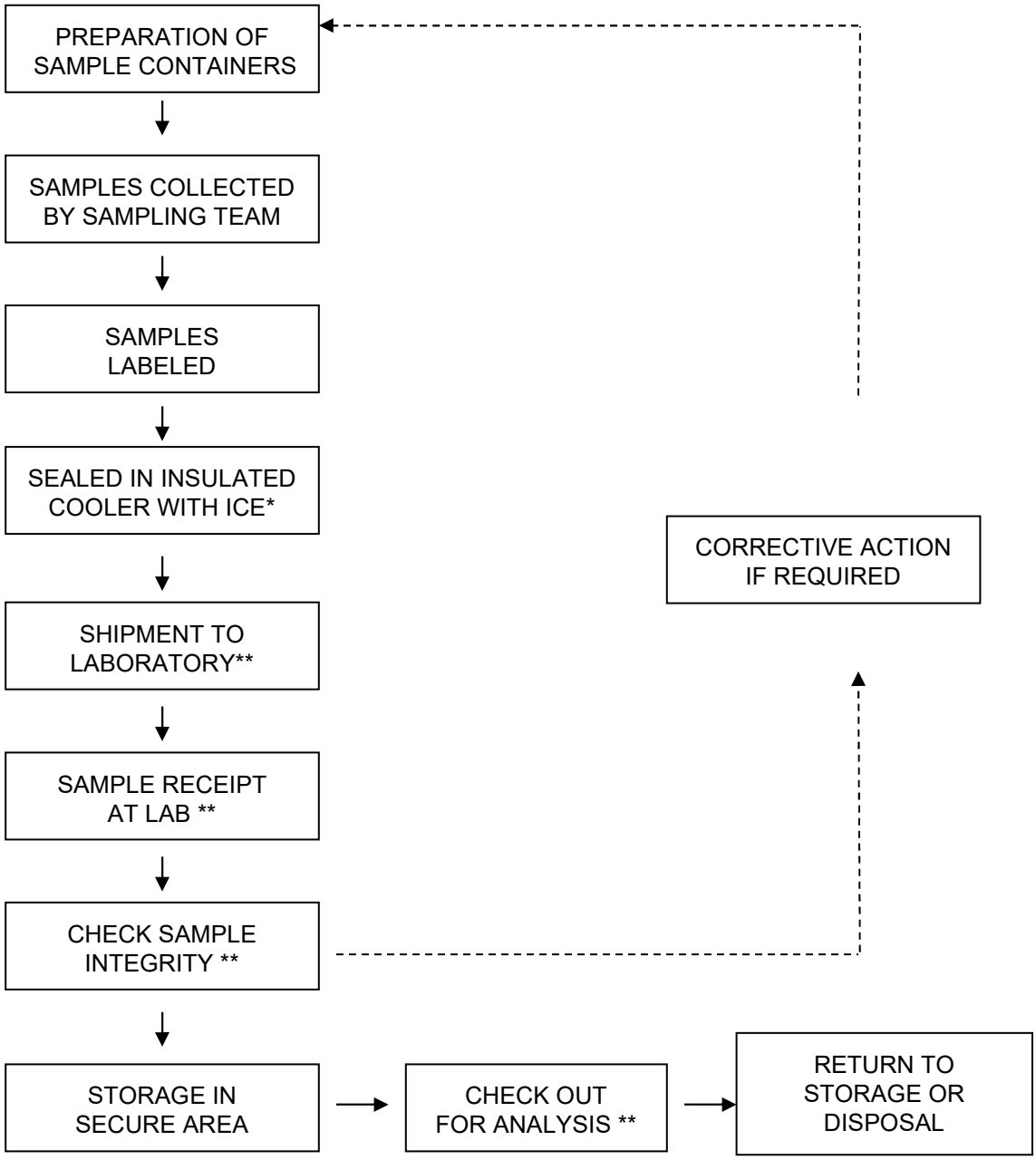
- Chain-of-custody will be initiated by the laboratory supplying the pre-cleaned and prepared sample containers. Chain-of-custody forms will accompany the sample containers.
- Following sample collection, the chain-of-custody form will be completed for the sample collected. The sample identification number, date and time of sample collection, analysis requested and other pertinent information (e.g., preservatives) will be recorded on the form. All entries will be made in waterproof, permanent blue or black ink.
- Langan field personnel will be responsible for the care and custody of the samples collected until the samples are transferred to another party, dispatched to the laboratory, or disposed. The sampling team leader will be responsible for enforcing chain-of-custody procedures during field work.
- When the form is full or when all samples have been collected that will fit in a single cooler, the sampling team leader will check the form for possible errors and sign the chain-of-custody form. Any necessary corrections will be made to the record with a single strike mark, dated, and initialed.

When soil and/or groundwater samples are collected, sample coolers will be accompanied by the chain-of-custody form, sealed in a Ziploc® bag (or equivalent) and placed on top of the samples or taped to the inside of the cooler lid. If applicable, a shipping bill will be completed for each cooler and the shipping bill number recorded on the chain-of-custody form.

Samples will be packaged for shipment to the laboratory with the appropriate chain-of-custody form. A copy of the form will be retained by the sampling team for the project file and the original will be sent to the laboratory with the samples. Bills of lading will also be retained as part of the documentation for the chain-of-custody records, if applicable. When transferring custody of the samples, the individuals relinquishing and receiving custody of the samples will verify sample numbers and condition and will document the sample acquisition and transfer by signing and dating the chain-of-custody form. This process documents sample custody transfer from the sampler to the analytical

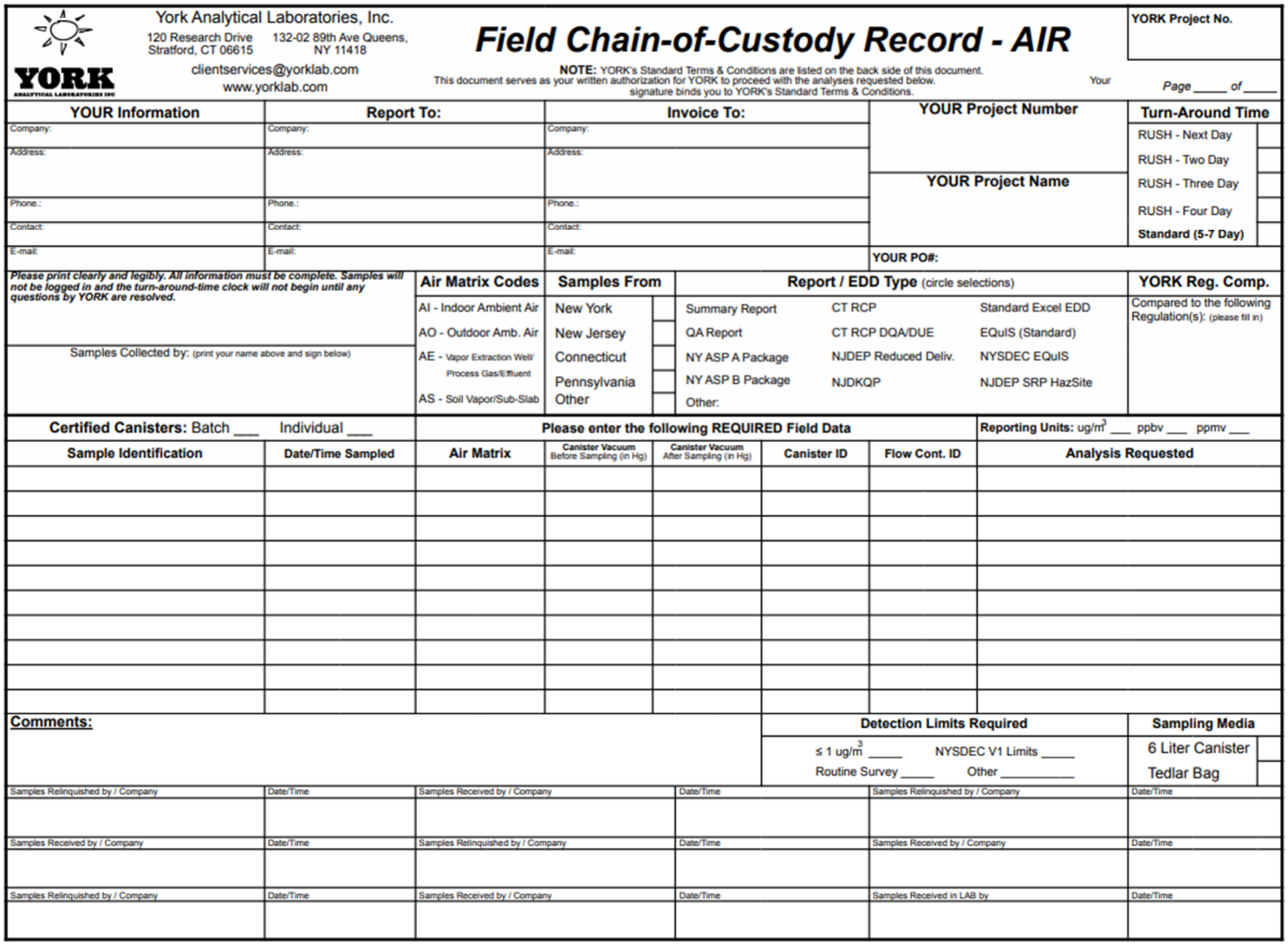
laboratory. A flow chart showing a sample custody process is included as Figure 5.1, and example chain-of-custody forms are included as Figures 5.2 and 5.3.

Figure 5.1 Sample Custody




** REQUIRES SIGN-OFF ON CHAIN-OF-CUSTODY FORM

Figure 5.2 Sample Chain-of-Custody Form – Air Samples



York Analytical Laboratories, Inc.
120 Research Drive, Stratford, CT 06615
132-02 89th Ave Queens, NY 11418
clientservices@yorklab.com
www.yorklab.com

**Field Chain-of-Custody Record - AIR**

**NOTE:** YORK's Standard Terms & Conditions are listed on the back side of this document. This document serves as your written authorization for YORK to proceed with the analyses requested below. Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No.

Page ____ of ____

| YOUR Information | Report To: | Invoice To: | YOUR Project Number | Turn-Around Time |
|---|---|---|---|---|
| Company: | Company: | Company: | | RUSH - Next Day |
| Address: | Address: | Address: | | RUSH - Two Day |
| | | | YOUR Project Name | RUSH - Three Day |
| Phone.: | Phone.: | Phone.: | | RUSH - Four Day |
| Contact: | Contact: | Contact: | | Standard (5-7 Day) |
| E-mail: | E-mail: | E-mail: | YOUR PO#: | |

*Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.*

Samples Collected by: (print your name above and sign below)

**Air Matrix Codes**
AI - Indoor Ambient Air
AO - Outdoor Amb. Air
AE - Vapor Extraction Well/ Process Gas/Effluent
AS - Soil Vapor/Sub-Slab

**Samples From**
New York
New Jersey
Connecticut
Pennsylvania
Other

**Report / EDD Type** (circle selections)
Summary Report | CT RCP | Standard Excel EDD
QA Report | CT RCP DQA/DUE | EQuIS (Standard)
NY ASP A Package | NJDEP Reduced Deliv. | NYSDEC EQuIS
NY ASP B Package | NJDKQP | NJDEP SRP HazSite
Other:

**YORK Reg. Comp.**
Compared to the following Regulation(s): (please fill in)

**Certified Canisters:** Batch ___ Individual ___

**Please enter the following REQUIRED Field Data**

**Reporting Units:** ug/m$^3$ ___ ppbv ___ ppmv ___

| Sample Identification | Date/Time Sampled | Air Matrix | Canister Vacuum Before Sampling (in Hg) | Canister Vacuum After Sampling (in Hg) | Canister ID | Flow Cont. ID | Analysis Requested |
|---|---|---|---|---|---|---|---|
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**Comments:**

**Detection Limits Required**
≤ 1 ug/m$^3$ ____ NYSDEC V1 Limits ____
Routine Survey ____ Other _____

**Sampling Media**
6 Liter Canister
Tedlar Bag

| Samples Relinquished by / Company | Date/Time | Samples Received by / Company | Date/Time | Samples Relinquished by / Company | Date/Time |
|---|---|---|---|---|---|
| | | | | | |
| **Samples Received by / Company** | **Date/Time** | **Samples Relinquished by / Company** | **Date/Time** | **Samples Received by / Company** | **Date/Time** |
| | | | | | |
| **Samples Relinquished by / Company** | **Date/Time** | **Samples Received by / Company** | **Date/Time** | **Samples Received in LAB by** | **Date/Time** |
| | | | | | |

Figure 5.3 Sample Chain-of-Custody Form – Soil and Groundwater Samples

**YORK**
ANALYTICAL LABORATORIES INC

# Field Chain-of-Custody Record

York Analytical Laboratories, Inc. (YORK)'s Standard Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization for YORK to proceed with the analyses requested below.
Your signature binds you to YORK's Standard Terms & Conditions.

YORK Project No.

120 Research Drive Stratford, CT 06615 132-02 89th Ave Queens, NY 11418 56 Church Hill Rd. #2 Newtown, CT 06470 clientservices@yorklab.com www.yorklab.com 800-306-YORK

Page _____ of _____

| YOUR Information | Report To: | Invoice To: | YOUR Project Number | Turn-Around Time |
|---|---|---|---|---|
| Company: | Company: | Company: | | RUSH - Next Day |
| Address: | Address: | Address: | YOUR Project Name | RUSH - Two Day |
| Phone.: | Phone.: | Phone.: | | RUSH - Three Day |
| Contact: | Contact: | Contact: | | RUSH - Four Day |
| E-mail: | E-mail: | E-mail: | YOUR PO#: | RUSH - Five Day |
| | | | | Standard (6-9 Day) |
| | | | | PFAS Standard is 7-10 Days |

*Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.*

**Samples Collected by:** (print AND sign your name)

| Matrix Codes | Samples From | Report / EDD Type (circle selections) | | | YORK Reg. Comp. |
|---|---|---|---|---|---|
| S - soil / solid | New York | Summary Report | CT RCP | EQuIS (Standard) | Compared to the following Regulation(s): (please fill in) |
| GW - groundwater | New Jersey | QA Report | CT RCP DQA/DUE | NYSDEC EQuIS | |
| DW - drinking water | Connecticut | CMDP | NJDEP Reduced Deliverables | NJDKQP | |
| WW - wastewater | Pennsylvania | Standard Excel EDD | | NJDEP SRP HazSite | |
| O - Oil / Other | Other: | NY ASP B Package | Other: | | |

| Sample Identification | Sample Matrix | Date/Time Sampled | Analyses Requested | Container Type | No. |
|---|---|---|---|---|---|
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**Comments:**

Samples iced/chilled at time of lab pickup? circle Yes or No

**Preservation:** (check all that apply)
HCl ____ MeOH ____ HNO3 ____ H2SO4 ____ NaOH ____
ZnAc ____ Ascorbic Acid ____ Other: _____

**Special Instruction**
Field Filtered
Lab to Filter

| 1. Samples Relinquished by / Company | Date/Time | 1. Samples Received by / Company | Date/Time | 2. Samples Relinquished by / Company | Date/Time |
|---|---|---|---|---|---|
| 2. Samples Received by / Company | Date/Time | 3. Samples Relinquished by / Company | Date/Time | 3. Samples Received by / Company | Date/Time |
| 4. Samples Relinquished by / Company | Date/Time | 4. Samples Received by / Company | Date/Time | Samples Received in LAB by | Date/Time Temperature Degrees C |

Laboratory chain-of-custody will be maintained throughout the analytical processes as described in the laboratory's Quality Assurance Manual. The analytical laboratory will provide a copy of the chain-of-custody in the analytical data deliverable package. The chain-of-custody becomes the permanent record of sample handling and shipment.

## 5.11 LABORATORY SAMPLE STORAGE PROCEDURES

The subcontracted laboratory will use a laboratory information management system (LIMS) to track and schedule samples upon receipt by the analytical laboratories. Any sample anomalies identified during sample log-in must be evaluated on individual merit for the impact upon the results and the data quality objectives of the project. When irregularities do exist, the environmental consultant must be notified to discuss recommended courses of action and documentation of the issue must be included in the project file.

For samples requiring thermal preservation, the temperature of each cooler will be immediately recorded. Each sample and container will be assigned a unique laboratory identification number and secured within the custody room walk-in coolers designated for new samples. Samples will be, as soon as practical, disbursed in a manner that is functional for the operational team. The temperature of all coolers and freezers will be monitored and recorded using a certified temperature sensor. Any temperature excursions outside of acceptance criteria (i.e., below 2°C or above 6°C) will initiate an investigation to determine whether any samples may have been affected. Samples for VOCs will be maintained in satellite storage areas within the VOC laboratory. Following analysis, the laboratory's specific procedures for retention and disposal will be followed as specified in the laboratory's SOPs and/or QA manual.

# 6.0 DATA REDUCTION, VALIDATION, AND REPORTING

## 6.1 INTRODUCTION

Data collected during the field investigation will be reduced and reviewed by the laboratory QA personnel, and a report on the findings will be tabulated in a standard format. The criteria used to identify and quantify the analytes will be those specified for the applicable methods in the USEPA SW-846 and subsequent updates. The data package provided by the laboratory will contain all items specified in the USEPA SW-846 methodology appropriate for the analyses to be performed and be reported in standard format.

The completed copies of the chain-of-custody records (both external and internal) accompanying each sample from time of initial bottle preparation to completion of analysis shall be attached to the analytical reports.

## 6.2 DATA REDUCTION

The Analytical Services Protocol (ASP) Category B data packages and an electronic data deliverable (EDD) will be provided by the laboratory after receipt of a complete sample delivery group. The Project Manager will immediately arrange for archiving the results and preparation of result tables. These tables will form the database for assessment of the site contamination condition.

Each EDD deliverable must be formatted using a Microsoft Windows operating system and the NYSDEC data deliverable format for Environmental Quality Information System (EQuIS). To avoid transcription errors, data will be loaded directly into the American Standard Code (ASC)II format from the LIMS. If this cannot be accomplished, the consultant should be notified via letter of transmittal indicating that manual entry of data is required for a particular method of analysis. All EDDs must also undergo a QC check by the laboratory before delivery. The original data, tabulations, and electronic media are stored in a secure and retrievable fashion.

The Project Manager or Task Manager will maintain close contact with the QA reviewer to ensure all non-conformance issues are acted upon prior to data manipulation and assessment routines. Once the QA review has been completed, the Project Manager may direct the Team Leaders or others to initiate and finalize the analytical data assessment.

## 6.3 DATA VALIDATION

Data validation will be performed in accordance with the USEPA Region 2 SOPs for data validation and USEPA's National Functional Guidelines for Organic and Inorganic Data Review. Tier 1 data validation (the equivalent of USEPA's Stage 2A validation) will be performed to evaluate data quality. Tier 1 data validation is based on completeness and compliance checks of sample-related QC results including:

- Holding times;
- Sample preservation;
- Blank results (method, trip, and field blanks);
- Surrogate recovery compounds and isotope dilution standards (as applicable);
- LCS/LCSD recoveries and RPDs;
- MS/MSD recoveries and RPDs;
- Laboratory duplicate RPDs; and
- Field duplicate RPDs.

A Data Usability Summary Report (DUSR) will be prepared by the data validator and reviewed by the QAO before issuance. The DUSR will present the results of data validation, including a summary assessment of laboratory data packages, sample preservation and chain-of-custody procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method.

Based on the results of data validation, the validated analytical results reported by the laboratory may be assigned the following validation qualification:

- "U" - Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank;
- "UJ" - Not detected. The reporting limit may be inaccurate or imprecise;
- "J" - Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method;
- "N" – Tentative identification. Analyte is considered present in the sample;

- "R" – Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample; and
- No Flag - Result accepted without qualification.

# 7.0 QUALITY ASSURANCE PERFORMANCE AUDITS AND SYSTEM AUDITS

## 7.1 INTRODUCTION

Quality assurance audits may be performed by the project quality assurance group under the direction and approval of the QAO. These audits will be implemented to evaluate the capability and performance of project and subcontractor personnel, items, activities, and documentation of the measurement system(s). Functioning as an independent body and reporting directly to corporate quality assurance management, the QAO may plan, schedule, and approve system and performance audits based upon procedures customized to the project requirements. At times, the QAO may request additional personnel with specific expertise from company and/or project groups to assist in conducting performance audits. However, these personnel will not have responsibility for the project work associated with the performance audit.

## 7.2 SYSTEM AUDITS

System audits may be performed by the QAO or designated auditors, and encompass a qualitative evaluation of measurement system components to ascertain their appropriate selection and application. In addition, field and laboratory quality control procedures and associated documentation may be system audited. These audits may be performed once during the performance of the project. However, if conditions adverse to quality are detected or if the Project Manager requests, additional audits may occur.

## 7.3 PERFORMANCE AUDITS

The laboratory may be required to conduct an analysis of Performance Evaluation samples or provide proof that Performance Evaluation samples submitted by USEPA or a state agency have been analyzed within the past twelve months.

## 7.4 FORMAL AUDITS

Formal audits refer to any system or performance audit that is documented and implemented by the QA group. These audits encompass documented activities performed by qualified lead auditors to a written procedure or checklists to objectively verify that quality assurance requirements have been developed, documented, and instituted in accordance with contractual and project criteria. Formal audits may be performed on project and subcontractor work at various locations.

Audit reports will be written by auditors who have performed the site audit after gathering and evaluating all data. Items, activities, and documents determined by lead auditors to be in noncompliance shall be identified at exit interviews conducted with the involved management. Non-compliances will be logged, and documented through audit findings,

which are attached to and are a part of the integral audit report. These audit-finding forms are directed to management to satisfactorily resolve the noncompliance in a specified and timely manner.

The Project Manager has overall responsibility to ensure that all corrective actions necessary to resolve audit findings are acted upon promptly and satisfactorily. Audit reports must be submitted to the Project Manager within fifteen days of completion of the audit. Serious deficiencies will be reported to the Project Manager within 24 hours. All audit checklists, audit reports, audit findings, and acceptable resolutions are approved by the QAO prior to issue. Verification of acceptable resolutions may be determined by re-audit or documented surveillance of the item or activity. Upon verification acceptance, the QAO will close out the audit report and findings.

## 8.0 CORRECTIVE ACTION

## 8.1 INTRODUCTION

The following procedures have been established to ensure that conditions adverse to quality, such as malfunctions, deficiencies, deviations, and errors, are promptly investigated, documented, evaluated, and corrected.

## 8.2 PROCEDURE DESCRIPTION

When a significant condition adverse to quality is noted at a site, laboratory, or subcontractor location, the cause of the condition will be determined and corrective action will be taken to preclude repetition. Condition identification, cause, reference documents, and corrective action planned to be taken will be documented and reported to the QAO, Project Manager, Field Team Leader and involved contractor management, at a minimum. Implementation of corrective action is verified by documented follow-up action.

All project personnel have the responsibility, as part of the normal work duties, to promptly identify, solicit approved correction, and report conditions adverse to quality. Corrective actions will be initiated as follows:

- When predetermined acceptance standards are not attained;
- When procedure or data compiled are determined to be deficient;
- When equipment or instrumentation is found to be faulty;
- When samples and analytical test results are not clearly traceable;
- When quality assurance requirements have been violated;
- When designated approvals have been circumvented;
- As a result of system and performance audits;
- As a result of a management assessment;
- As a result of laboratory/field comparison studies; and
- As required by USEPA SW-846, and subsequent updates, or by the NYSDEC ASP.

Project management personnel, field investigation teams, remedial response planning personnel, and laboratory groups monitor on-going work performance in the normal course of daily responsibilities. Work may be audited at project sites, laboratories, or contractor locations. Activities, or documents ascertained to be noncompliant with quality assurance requirements will be documented. Corrective actions will be mandated through audit finding sheets attached to the audit report. Audit findings are logged, maintained, and controlled by the Task Manager.

Personnel assigned to quality assurance functions will have the responsibility to issue and control Corrective Action Request (CAR) Forms (Figure 8.1 or similar by email). The CAR identifies the out-of-compliance condition, reference document(s), and recommended corrective action(s) to be administered. The CAR is issued to the personnel responsible for the affected item or activity.

A copy is also submitted to the Project Manager. The individual to whom the CAR is addressed returns the requested response promptly to the QA personnel, affixing his/her signature and date to the corrective action block, after stating the cause of the conditions and corrective action to be taken. The QA personnel maintain the log for status of CARs, confirms the adequacy of the intended corrective action, and verifies its implementation. CARs will be retained in the project file for the records.

Any project personnel may identify noncompliance issues; however, the designated QA personnel are responsible for documenting, numbering, logging, and verifying the close out action. The Project Manager will be responsible for ensuring that all recommended corrective actions are implemented, documented, and approved.

Figure 8.1 Corrective Action Request

**CORRECTIVE ACTION REQUEST**

Number: _____ Date: _____

TO: _____

You are hereby requested to take corrective actions indicated below and as otherwise determined by you to (a) resolve the noted condition and (b) to prevent it from recurring. Your written response is to be returned to the project quality assurance manager by _____

CONDITION:

REFERENCE DOCUMENTS:

RECOMMENDED CORRECTIVE ACTIONS:

_____ _____ _____ _____ _____ _____

Originator Date Approval Date Approval Date

RESPONSE

CAUSE OF CONDITION

CORRECTIVE ACTION

(A) RESOLUTION

(B) PREVENTION

(C) AFFECTED DOCUMENTS

C.A. FOLLOWUP:

CORRECTIVE ACTION VERIFIED BY: _____ DATE:_____

## 9.0 REFERENCES


NYSDEC. Division of Environmental Remediation. DER-10/Technical Guidance for Site Investigation and Remediation, dated May 3, 2010.

Taylor, J. K., 1987. Quality Assurance of Chemical Measurements. Lewis Publishers, Inc., Chelsea, Michigan

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USEPA, 1992a. CLP Organics Data Review and Preliminary Review. SOP No. HW-6, Revision #8, dated January 1992. USEPA Region II.

USEPA, 1992b. Evaluation of Metals Data for the Contract Laboratory Program (CLP) based on SOW 3/90. SOP No. HW-2, Revision XI, dated January 1992. USEPA Region II.

USEPA, 2016. Low/Medium Volatile Data Validation. SOP No. HW-33A, Revision 1, dated September 2016. USEPA Region II.

USEPA, 2015. PCB Aroclor Data Validation. SOP No. HW-37A, Revision 0, dated July 2015. USEPA Region II.

USEPA, 2016. ICP-AES Data Validation. SOP No. HW-3a, Revision 1, dated September 2016. USEPA Region II.

USEPA, 2016. Mercury and Cyanide Data Validation. SOP No. HW-3c, Revision 1, dated September 2016. USEPA Region II.

USEPA, 2016. Pesticide Data Validation. SOP No. HW-36A, Revision 1, dated October 2016. USEPA Region II.

USEPA, 2016. Semivolatile Data Validation. SOP No. HW-35A, Revision 1, dated September 2016. USEPA Region II.

USEPA 2020a. National Functional Guidelines for Organic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation, EPA-540-R-20-005, November 2020.

USEPA 2020b. National Functional Guidelines for Inorganic Superfund Methods Data Review, Office of Superfund Remediation and Technology Innovation, EPA-540-R-20-006, November 2020

# ATTACHMENT A

# RESUMES

# WILLIAM BOHRER, PG

## SENIOR PROJECT GEOLOGIST

## GEOLOGIST

Mr. Bohrer is an experienced geologist responsible for managing Langan's environmental standards and Health and Safety compliance for projects throughout New York City. His services include dissemination of environmental protocols, troubleshooting at project sites, in-house/field training, and maintenance of quality standards across the environmental discipline. Mr. Bohrer has a diverse and extensive background in geophysics, hydrogeology, mining and petroleum, and geotechnical engineering. He has developed conceptual site models for public, industrial and commercial facilities nationwide.



### SELECTED PROJECTS

- NYU Poly – 122 Johnson Street, Brooklyn, NY
- Con Edison of New York at Governor's Island, NY, NY
- 535 4th Avenue, Brooklyn, NY
- 27 Wooster Street, New York, NY
- 42 West Street, Brooklyn, NY
- 455 West 19th Street, New York, NY
- Kings Plaza Mall, Brooklyn, NY
- Hudson Yards "Terra Firma," New York, NY
- Hudson Yards, Platform Special Inspection, New York, NY
- PSAC II, Bronx, NY
- 595-647 Smith Street, Brooklyn, NY
- New York University, 7-13 Washington Square North Investigation, New York, NY
- NYU 4 Washington Square Village, New York, NY
- 125th Street and Lenox Avenue, New York, NY
- Sullivan Street Development, New York, NY
- Hudson Crossing II, New York, NY
- New York Aquarium, Shark Tank & Animal Care Facility, Brooklyn, NY
- 209-219 Sullivan Street, New York, NY
- 261 Hudson Street, New York, NY
- 460 Washington Street, New York, NY
- 552 West 24th Street, New York, NY
- Brooklyn Bridge Park Pier 1, New York, NY
- International Leadership Bronx Charter School, Bronx, NY
- 203 East 92nd Street, New York, NY
- HighLine 28-29, New York, NY
- 539 Smith Street Bulkhead, Brooklyn, NY
- Willets Point, Corona, NY
- Plume Migration and Fracture Flow Aquifer Investigation, Brunswick, MD
- Plume Migration and Fracture Flow Aquifer Investigation, Fallston, MD
- Emergency Response Site Investigation & Remediation, Wappingers Falls, NY
- Emergency Response Site Investigation & Remediation, Allentown, PA

### EDUCATION

Post Graduate Studies in Geophysics
Cornell University

B.S., Geology
Tufts University

### PROFESSIONAL REGISTRATION

Professional Geologist (PG) in NY

40 Hour OSHA HazWOPER

OSHA Construction Safety & Health

OSHA Supervisory Certification Credential (TWIC)

Transportation Worker Identification

NYS DEC- Protecting New York's Natural Resources with Better Construction Site Management

### AFFILIATIONS

American Association of Petroleum Geologists

National Groundwater Association

Geological Society of America

LANGAN

- Emergency Response Site Investigation & Remediation, Shamokin, PA
- Bermuda International Airport, Jet Fuel Release Investigation, Bermuda
- Little Missouri River Basin, Geotechnical Site Evaluation (Horizontal Drilling Pipeline Install), ND
- Seismic Susceptibility Evaluation (Class 2 Injection Wells), Litchfield, OH
- Bedrock Mapping, Bradford and Sullivan Counties, PA
- Soil Solidification, Carteret, NJ

NY State Council of Professional Geologist

American Geophysical Union

# EMILY BUTLER

## SENIOR PROJECT MANAGER

## ENVIRONMENTAL ENGINEERING

Ms. Butler is a Senior Project Manager with over 12 years of experience in environmental consulting in the New York Metropolitan area. Her technical specialties include the design, implementation, and management of remedial investigations and remedial actions for sites in regulatory programs including USEPA Federal Superfund, NYSDEC Brownfield Cleanup Program, and NYCOER E-designation. Ms. Butler manages a variety of multi-disciplinary Brownfield redevelopment projects in the NYC metropolitan area.



### SELECTED PROJECTS

- 515-519 West 43rd Street, Brownfield Redevelopment, New York, NY*
- Former Tilsdale Lumber and Coal Redevelopment, Brownfield Redevelopment, Queens, NY*
- 101 East Kingsbridge Road, Brownfield Redevelopment, Bronx, NY*
- 1660 Boone Avenue, Brownfield Redevelopment, Bronx, NY*
- 1003 East 173rd Street, Brownfield Redevelopment, Bronx, NY*
- Former New City Link Auto Repair Site, Brownfield Redevelopment, Brooklyn, NY*
- 1 Java Street, Brownfield Redevelopment, Brooklyn, NY*
- Amtrak Sunnyside Yards, NYS Superfund Remediation, Queens, NY*
- Cinemagic Studios, Brownfield Redevelopment, Queens, NY*
- 39-04 Northern Boulevard, Brownfield Redevelopment, Queens, NY*
- 40-40 Northern Boulevard, Brownfield Redevelopment, Queens, NY*
- 85 Jane Street, E-Designation Remediation/Redevelopment, New York, NY*
- Project Hank, Due Diligence, New York, NY*
- Gotham Point, Brownfield Redevelopment, Queens, NY*
- ExxonMobil Greenpoint Petroleum Remediation Project, Brooklyn, NY*
- 545 Sackett Street, Former MGP Site, Brooklyn, NY*
- The SoNo Collection Project, Brownfield Redevelopment, Norwalk, CT*
- Tangram House, E-Designation Remediation/Redevelopment, Queens, NY*
- Atlantic Yards/Pacific Park, E-Designation Remediation/Redevelopment, Brooklyn, NY*
- Former Pratt Oil Works, Petroleum Remediation Program, Queens, NY*
- Columbia Falls Aluminum Company, EPA Superfund Site, Columbia Falls, MT*

### EDUCATION

B.A., Geology
Colgate University

### PROFESSIONAL REGISTRATION

OSHA 40-Hour
HAZWOPER
NYCDOB 40-Hour SST

**Work performed prior to joining Langan.*



# JOSEPH CONBOY

Project Chemist
Environmental Engineering

**Education**

B.S., Chemistry,
Rowan University

Mr. Conboy has 12 years of experience in environmental consulting, specializing in chemical data validation, data quality assessments, data usability evaluations, and EQuIS database management. ears of experience in environmental consulting, specializing in chemical data validation, data quality assessments, data usability evaluations, and EQuIS database management.

**Selected Projects**

- Former Ballantine Brewery, Newark, NJ
- Former Curtiss-Wright Facility, Wood-Ridge, NJ
- Former Duane Marine Site, Perth Amboy, NJ
- Former Perth Amboy Gas Works, Perth Amboy, NJ
- Former Plessey Dynamics Site, Hillside, NJ
- Former MGP Site, Wildwood, NJ
- JCP&L Union Beach District Office, Keyport, NJ
- K-8 School, New Brunswick, NJ
- Linden Terminal, Linden, NJ
- Paulsboro Packaging Site, Paulsboro, NJ
- 23-30 Borden Avenue, Long Island City, NY
- 25-01 Queens Plaza North, Long Island City, NY
- 37-11 30th Street, Long Island City, NY
- 266 West 96th Street, New York, NY
- 414 Gerard Avenue, Bronx, NY
- 445 Gerard Avenue, Bronx, NY
- 475 Bay Street, Staten Island,
- 538-544 Hudson Street, New York, NY
- 805-825 Atlantic Avenue, Brooklyn, NY
- 1400 Ferris Place, Bronx, NY
- 1607 Surf Avenue, Coney Island, NY
- 1900 River Road, Burlington, NJ
- 2447 Third Avenue, New York, NY
- ABC - Block 27, Long Island City, NY
- American Dream Meadowlands, East Rutherford, NJ
- Bedford Armory, Brooklyn, NY
- Gowanus Canal Northside, Brooklyn, NY
- President Street Properties, New York, NY
- Suffolk Street, New York, NY
- Willets Point, Queens, NY

# ROBERT KOVACS, LSRP, PG

## SENIOR ASSOCIATE

## ENVIRONMENTAL ENGINEERING

Mr. Kovacs is an experienced environmental scientist with over 25 years of experience. His technical specialties include design, implementation and management of environmental site assessments, remedial investigations, remedial actions, and construction support at Brownfield Redevelopment, transportation and industrial sites. Mr. Kovacs has experience in developing cost-saving project strategies through skillful regulatory agency negotiations. He also has background in characterization and decommissioning of industrial manufacturing facilities and serving as a corporate QA/QC officer.



### SELECTED PROJECTS

- Java Street Waterfront Development, Greenpoint, NY*
- Amtrak Sunnyside Yard State Superfund Site, Long Island City, NY*
- Amtrak Major Infrastructure Upgrade Construction Projects, Various Locations*
- Major Pharmaceutical Manufacturing Facility Redevelopment, Brooklyn, NY*
- Affordable Housing Development and MGP Waste Remediation, Sag Harbor, NY*
- Industrial Warehouse Development, Bayshore, NY*
- Affordable Housing Development, Bronx, NY*
- Chlorinated Solvent Remediation, Parsippany-Troy Hills, NJ*
- Hudson Exchange West (Multiple Phases), Jersey City, NJ*
- Residential/Commercial High-Rise Development, Brooklyn, NY*
- Chlorinated Solvent Release, Bernardsville, NJ*
- Former Vehicle Maintenance Facility, Parlin, NJ*
- NJ Transit Active Bus Facility, Fairview, NJ*
- Residential High-Rise Development, New York, NY*
- Ship Dry Dock Facility, Hoboken, NJ*
- BICC Cables, Yonkers, NY*
- Amtrak Electrical Substation PCB Cleanup, Rahway, NJ*
- NJ Transit Active Railyard, Roxbury Township, NJ*
- Former Pharmaceutical Manufacturing Facility Decommissioning and Demolition, Brooklyn, NY*
- PCB Building Material Remediation, Confidential Location*

### SELECTED PUBLICATIONS, REPORTS, AND PRESENTATIONS

Kovacs, R., Senh, S., Silverstein, W., Moss, D., Kelley, R. (2016), “Significant Acceleration of Time Frame to Closure via Transition from Long-Term Biological Treatment to ZVI/EVO Injection.” Proceedings of the Battelle Tenth International Conference on Remediation of Chlorinated and Recalcitrant Compounds

### EDUCATION

B.A., Biological Sciences
University of Delaware

### PROFESSIONAL REGISTRATION

Licensed Site Remediation Professional (LSRP) in NJ

Professional Geologist (PG) in NY

NJDEP UST Certification Program – Subsurface Evaluator

OSHA 40-Hour HAZWOPER

OSHA 8-Hour HAZWOPER

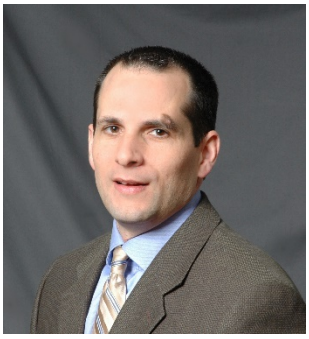
**Work performed prior to joining Langan.*

Henke, R., Kovacs, R., Kaiser, D (2022), “Strategy to Overcome Sub-Slab Depressurization System Design and Operational Challenges in an Existing Building with Sensitive Tenant Use.” Proceedings of the Battelle Twelfth International Conference on Remediation of Chlorinated and Recalcitrant Compounds

# ANTHONY MOFFA, JR., ASP, CHMM, COSS, CSP

## ASSOCIATE
## CORPORATE HEALTH AND SAFETY MANAGER

Anthony is Langan's Corporate Health & Safety Manager and is responsible for managing health and safety compliance in all Langan office locations. He has 29 years of experience in the health and safety field. He is responsible for ensuring compliance with all federal and state occupational health and safety laws and development and implementation of corporate health and safety policies. His responsibilities include reviewing and updating Langan's Corporate Health and Safety Program and assisting employees in the development of site specific Health & Safety Plans. He maintains and manages health and safety records for employees in all Langan office locations including medical evaluations, respirator fit testing, and Hazardous Waste Operations and Emergency Response training. He is also responsible for documentation and investigation of work-related injuries and incidents and sharing this information with employees to assist in the prevention of future incidents. He is also the chairman of the Corporate Health & Safety Committee and Health & Safety Leadership Team that meet periodically throughout the year. He is responsible for coordinating and providing health and safe training to Langan employees. He was formerly the Environmental, Health and Safety Coordinator at a chemical manufacturer. His experience included employee hazard communications, development of material safety data sheets for developed products, respirator fit testing and conducting required Occupational Health & Safety Association and Department of Transportation training.



**EDUCATION**

B.S., Physics
West Chester University

**PROFESSIONAL REGISTRATION**

Associate Safety Professional (ASP)

Certified Hazardous Material Manager (CHMM)

Certified Occupational Safety Specialist (COSS)

Certified Safety Professional (CSP)

**AFFILIATIONS**

Pennsylvania Chamber of Business & Industry

Chemical Council of New Jersey

New Jersey Business & Industry Association

American Society of Safety Professionals

# CONNOR MOORE

## SENIOR STAFF SCIENTIST

## ENVIRONMENTAL ENGINEERING

Mr. Moore has six years of experience specializing in environmental consulting. He has a strong background in conducting due diligence investigations and implementing remedial solutions, with a particular emphasis on large-scale projects with several stakeholders. Mr. Moore's technical expertise spans environmental site assessments, remedial investigation, and comprehensive air quality monitoring for industrial, commercial, utility, and public-sector environments. He will support the environmental group in New York City.



### SELECTED PROJECTS

- Abraham Lincoln High School, Los Angeles, CA*
- Expanded Learning Opportunities Program, Los Angeles County, CA*
- California Water Service Subgrade Vaults, Los Angeles, Kern, San Mateo and Santa Clara Counties, CA*
- 17352 Daimler Street, Irvine, CA*

### EDUCATION

B.A., Environmental Biology
Columbia University

### PROFESSIONAL REGISTRATION

OSHA 40-Hr HAZWOPER

OSHA 8-Hr HAZWOPER Supervisor

**Work performed prior to joining Langan.*

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# ATTACHMENT B

# LABORATORY REPORTING LIMITS AND METHOD DETECTION LIMITS

**APPENDIX B**
**LABORATORY REPORTING LIMITS AND METHOD DETECTION LIMITS**

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,1,1,2-Tetrachloroethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,1,1-Trichloroethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,1,2,2-Tetrachloroethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,1,2-Trichloroethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,1-Dichloroethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,1-Dichloroethylene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,1-Dichloropropylene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,2,3-Trichlorobenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,2,3-Trichloropropane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,2,4,5-Tetramethylbenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,2,4-Trichlorobenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,2,4-Trimethylbenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,2-Dibromo-3-chloropropane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,2-Dibromoethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,2-Dichlorobenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,2-Dichloroethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,2-Dichloropropane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,3,5-Trimethylbenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,3-Dichlorobenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,3-Dichloropropane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,4-Dichlorobenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 1,4-Dioxane | 50 | 100 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 2,2-Dichloropropane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 2-Butanone | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 2-Chlorotoluene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 2-Hexanone | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 4-Chlorotoluene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | 4-Methyl-2-pentanone | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Acetone | 5 | 10 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Acrolein | 5 | 10 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Acrylonitrile | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Benzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Bromobenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Bromochloromethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Bromodichloromethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Bromoform | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Bromomethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Carbon disulfide | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Carbon tetrachloride | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Chlorobenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Chloroethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Chloroform | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Chloromethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | cis-1,2-Dichloroethylene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | cis-1,3-Dichloropropylene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Cyclohexane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Dibromochloromethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Dibromomethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Dichlorodifluoromethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Ethyl Benzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Hexachlorobutadiene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Isopropylbenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Methyl acetate | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Methyl tert-butyl ether (MTBE) | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Methylcyclohexane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Methylene chloride | 5 | 10 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Naphthalene | 2.5 | 10 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | n-Butylbenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | n-Propylbenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | o-Xylene | 2.5 | 5 | ug/kg |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | p- & m- Xylenes | 5 | 10 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | p-Diethylbenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | p-Ethyltoluene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | p-Isopropyltoluene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | sec-Butylbenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Styrene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | tert-Butyl alcohol (TBA) | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | tert-Butylbenzene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Tetrachloroethylene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Toluene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | trans-1,2-Dichloroethylene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | trans-1,3-Dichloropropylene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | trans-1,4-dichloro-2-butene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Trichloroethylene | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Trichlorofluoromethane | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Vinyl acetate | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Vinyl Chloride | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Xylenes, Total | 7.5 | 15 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Soil | Chlorodifluoromethane (Freon 22) | 2.5 | 5 | ug/kg |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,1,1,2-Tetrachloroethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,1,1-Trichloroethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,1,2,2-Tetrachloroethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,1,2-Trichloroethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,1-Dichloroethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,1-Dichloroethylene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,1-Dichloropropylene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,2,3-Trichlorobenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,2,3-Trichloropropane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,2,4,5-Tetramethylbenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,2,4-Trichlorobenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,2,4-Trimethylbenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,2-Dibromo-3-chloropropane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,2-Dibromoethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,2-Dichlorobenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,2-Dichloroethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,2-Dichloropropane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,3,5-Trimethylbenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,3-Dichlorobenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,3-Dichloropropane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,4-Dichlorobenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 1,4-Dioxane | 40 | 40 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 2,2-Dichloropropane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 2-Butanone | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 2-Chlorotoluene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 2-Hexanone | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 4-Chlorotoluene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | 4-Methyl-2-pentanone | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Acetone | 1 | 2 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Acrolein | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Acrylonitrile | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Benzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Bromobenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Bromochloromethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Bromodichloromethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Bromoform | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Bromomethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Carbon disulfide | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Carbon tetrachloride | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Chlorobenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Chloroethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Chloroform | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Chloromethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | cis-1,2-Dichloroethylene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | cis-1,3-Dichloropropylene | 0.2 | 0.5 | ug/L |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Cyclohexane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Dibromochloromethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Dibromomethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Dichlorodifluoromethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Ethyl Benzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Hexachlorobutadiene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Isopropylbenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Methyl acetate | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Methyl tert-butyl ether (MTBE) | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Methylcyclohexane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Methylene chloride | 1 | 2 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Naphthalene | 1 | 2 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | n-Butylbenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | n-Propylbenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | o-Xylene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | p- & m- Xylenes | 0.5 | 1 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | p-Diethylbenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | p-Ethyltoluene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | p-Isopropyltoluene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | sec-Butylbenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Styrene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | tert-Butyl alcohol (TBA) | 0.5 | 1 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | tert-Butylbenzene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Tetrachloroethylene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Toluene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | trans-1,2-Dichloroethylene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | trans-1,3-Dichloropropylene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | trans-1,4-dichloro-2-butene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Trichloroethylene | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Trichlorofluoromethane | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Vinyl acetate | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Vinyl Chloride | 0.2 | 0.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Xylenes, Total | 0.6 | 1.5 | ug/L |
| EPA 8260D | Volatile Organics, 8260 - Comprehensive | Water | Chlorodifluoromethane (Freon 22) | 0.2 | 0.5 | ug/L |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Semivolatile Organic Compounds** | | | | | | |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 1,1-Biphenyl | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 1,2,4,5-Tetrachlorobenzene | 41.7 | 83.3 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 1,2,4-Trichlorobenzene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 1,2-Dichlorobenzene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 1,2-Diphenylhydrazine (as Azobenzene) | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 1,3-Dichlorobenzene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 1,4-Dichlorobenzene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2,3,4,6-Tetrachlorophenol | 41.7 | 83.3 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2,4,5-Trichlorophenol | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2,4,6-Trichlorophenol | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2,4-Dichlorophenol | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2,4-Dimethylphenol | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2,4-Dinitrophenol | 41.7 | 83.3 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2,4-Dinitrotoluene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2,6-Dinitrotoluene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2-Chloronaphthalene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2-Chlorophenol | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2-Methylnaphthalene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2-Methylphenol | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2-Nitroaniline | 41.7 | 83.3 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 2-Nitrophenol | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 3- & 4-Methylphenols | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 3,3-Dichlorobenzidine | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 3-Nitroaniline | 41.7 | 83.3 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 4,6-Dinitro-2-methylphenol | 41.7 | 83.3 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 4-Bromophenyl phenyl ether | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 4-Chloro-3-methylphenol | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 4-Chloroaniline | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 4-Chlorophenyl phenyl ether | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 4-Nitroaniline | 41.7 | 83.3 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | 4-Nitrophenol | 41.7 | 83.3 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Acenaphthene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Acenaphthylene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Acetophenone | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Aniline | 83.5 | 167 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Anthracene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Atrazine | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Benzaldehyde | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Benzidine | 83.5 | 167 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Benzo(a)anthracene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Benzo(a)pyrene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Benzo(b)fluoranthene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Benzo(g,h,i)perylene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Benzo(k)fluoranthene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Benzoic acid | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Benzyl alcohol | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Benzyl butyl phthalate | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Bis(2-chloroethoxy)methane | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Bis(2-chloroethyl)ether | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Bis(2-chloroisopropyl)ether | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Bis(2-ethylhexyl)phthalate | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Caprolactam | 41.7 | 83.3 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Carbazole | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Chrysene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Dibenzo(a,h)anthracene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Dibenzofuran | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Diethyl phthalate | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Dimethyl phthalate | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Di-n-butyl phthalate | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Di-n-octyl phthalate | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Diphenylamine | 41.7 | 83.3 | ug/kg |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Semivolatile Organic Compounds** | | | | | | |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Fluoranthene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Fluorene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Hexachlorobenzene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Hexachlorobutadiene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Hexachlorocyclopentadiene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Hexachloroethane | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Indeno(1,2,3-cd)pyrene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Isophorone | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Naphthalene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Nitrobenzene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | N-Nitrosodimethylamine | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | N-nitroso-di-n-propylamine | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | N-Nitrosodiphenylamine | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Pentachlorophenol | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Phenanthrene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Phenol | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Pyrene | 20.9 | 41.7 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Pyridine | 83.5 | 167 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Soil | Benzo(a)pyrene (BAP) Equivalent-BAPE | 146 | 292 | ug/kg |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 1,1-Biphenyl | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 1,2,4,5-Tetrachlorobenzene | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 1,2,4-Trichlorobenzene | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 1,2-Dichlorobenzene | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 1,2-Diphenylhydrazine (as Azobenzene) | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 1,3-Dichlorobenzene | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 1,4-Dichlorobenzene | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2,3,4,6-Tetrachlorophenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2,4,5-Trichlorophenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2,4,6-Trichlorophenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2,4-Dichlorophenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2,4-Dimethylphenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2,4-Dinitrophenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2,4-Dinitrotoluene | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2,6-Dinitrotoluene | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2-Chloronaphthalene | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2-Chlorophenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2-Methylnaphthalene | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2-Methylphenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2-Nitroaniline | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 2-Nitrophenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 3- & 4-Methylphenols | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 3,3-Dichlorobenzidine | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 3-Nitroaniline | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 4,6-Dinitro-2-methylphenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 4-Bromophenyl phenyl ether | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 4-Chloro-3-methylphenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 4-Chloroaniline | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 4-Chlorophenyl phenyl ether | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 4-Nitroaniline | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | 4-Nitrophenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Acenaphthene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Acenaphthylene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Acetophenone | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Aniline | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Anthracene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Atrazine | 0.5 | 0.5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Benzaldehyde | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Benzidine | 10 | 20 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Benzo(a)anthracene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Benzo(a)pyrene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Benzo(b)fluoranthene | 0.05 | 0.05 | ug/L |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Semivolatile Organic Compounds** | | | | | | |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Benzo(g,h,i)perylene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Benzo(k)fluoranthene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Benzoic acid | 25 | 50 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Benzyl alcohol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Benzyl butyl phthalate | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Bis(2-chloroethoxy)methane | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Bis(2-chloroethyl)ether | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Bis(2-chloroisopropyl)ether | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Bis(2-ethylhexyl)phthalate | 0.5 | 0.5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Caprolactam | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Carbazole | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Chrysene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Dibenzo(a,h)anthracene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Dibenzofuran | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Diethyl phthalate | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Dimethyl phthalate | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Di-n-butyl phthalate | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Di-n-octyl phthalate | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Diphenylamine | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Fluoranthene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Fluorene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Hexachlorobenzene | 0.02 | 0.02 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Hexachlorobutadiene | 0.5 | 0.5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Hexachlorocyclopentadiene | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Hexachloroethane | 0.5 | 0.5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Indeno(1,2,3-cd)pyrene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Isophorone | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Naphthalene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Nitrobenzene | 0.25 | 0.25 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | N-Nitrosodimethylamine | 0.5 | 0.5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | N-nitroso-di-n-propylamine | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | N-Nitrosodiphenylamine | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Pentachlorophenol | 0.25 | 0.25 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Phenanthrene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Phenol | 2.5 | 5 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Pyrene | 0.05 | 0.05 | ug/L |
| EPA 8270E | Semi-Volatiles, 8270 - Comprehensive | Water | Pyridine | 2.5 | 5 | ug/L |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Pesticides** | | | | | | |
| EPA 8081B | Pesticides, 8081 target list | Soil | 4,4'-DDD | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | 4,4'-DDD [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | 4,4'-DDE | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | 4,4'-DDE [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | 4,4'-DDT | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | 4,4'-DDT [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Aldrin | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Aldrin [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | alpha-BHC | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | alpha-BHC [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | alpha-Chlordane | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | alpha-Chlordane [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | beta-BHC | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | beta-BHC [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Chlordane, total | 6.6 | 6.6 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Chlordane, total [2C] | 6.6 | 6.6 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | delta-BHC | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | delta-BHC [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Dieldrin | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Dieldrin [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Endosulfan I | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Endosulfan I [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Endosulfan II | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Endosulfan II [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Endosulfan sulfate | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Endosulfan sulfate [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Endrin | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Endrin [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Endrin aldehyde | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Endrin aldehyde [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Endrin ketone | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Endrin ketone [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | gamma-BHC (Lindane) | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | gamma-BHC (Lindane) [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | gamma-Chlordane | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | gamma-Chlordane [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Heptachlor | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Heptachlor [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Heptachlor epoxide | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Heptachlor epoxide [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Methoxychlor | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Methoxychlor [2C] | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Toxaphene | 33 | 33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Toxaphene [2C] | 33 | 33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Soil | Mirex | 0.33 | 0.33 | ug/kg |
| EPA 8081B | Pesticides, 8081 target list | Water | 4,4'-DDD | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | 4,4'-DDD [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | 4,4'-DDE | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | 4,4'-DDE [2C] | 0.004 | 0.004 | ug/L |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Pesticides** | | | | | | |
| EPA 8081B | Pesticides, 8081 target list | Water | 4,4'-DDT | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | 4,4'-DDT [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Aldrin | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Aldrin [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | alpha-BHC | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | alpha-BHC [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | alpha-Chlordane | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | alpha-Chlordane [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | beta-BHC | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | beta-BHC [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Chlordane, total | 0.02 | 0.02 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Chlordane, total [2C] | 0.02 | 0.02 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | delta-BHC | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | delta-BHC [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Dieldrin | 0.002 | 0.002 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Dieldrin [2C] | 0.002 | 0.002 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Endosulfan I | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Endosulfan I [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Endosulfan II | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Endosulfan II [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Endosulfan sulfate | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Endosulfan sulfate [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Endrin | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Endrin [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Endrin aldehyde | 0.01 | 0.01 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Endrin aldehyde [2C] | 0.01 | 0.01 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Endrin ketone | 0.01 | 0.01 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Endrin ketone [2C] | 0.01 | 0.01 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | gamma-BHC (Lindane) | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | gamma-BHC (Lindane) [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | gamma-Chlordane | 0.01 | 0.01 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | gamma-Chlordane [2C] | 0.01 | 0.01 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Heptachlor | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Heptachlor [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Heptachlor epoxide | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Heptachlor epoxide [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Methoxychlor | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Methoxychlor [2C] | 0.004 | 0.004 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Toxaphene | 0.1 | 0.1 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Toxaphene [2C] | 0.1 | 0.1 | ug/L |
| EPA 8081B | Pesticides, 8081 target list | Water | Mirex | 0.004 | 0.004 | ug/L |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Polychlorinated Biphenyls** | | | | | | |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1016 | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1016 [2C] | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1221 | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1221 [2C] | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1232 | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1232 [2C] | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1242 | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1242 [2C] | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1248 | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1248 [2C] | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1254 | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1254 [2C] | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1260 | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1260 [2C] | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1262 | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1262 [2C] | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1268 | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Aroclor 1268 [2C] | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Total PCBs | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Soil | Total PCBs [2C] | 0.0167 | 0.0167 | mg/kg |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1016 | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1016 [2C] | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1221 | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1221 [2C] | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1232 | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1232 [2C] | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1242 | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1242 [2C] | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1248 | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1248 [2C] | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1254 | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1254 [2C] | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1260 | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1260 [2C] | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1262 | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1262 [2C] | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1268 | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Aroclor 1268 [2C] | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Total PCBs | 0.05 | 0.05 | ug/L |
| EPA 8082A | Polychlorinated Biphenyls (PCB) | Water | Total PCBs [2C] | 0.05 | 0.05 | ug/L |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Herbicides** | | | | | | |
| EPA 8151A | Herbicides, NYSDEC Part 375 Target List | Soil | 2,4,5-T | 20 | 20 | ug/kg |
| EPA 8151A | Herbicides, NYSDEC Part 375 Target List | Soil | 2,4,5-T [2C] | 20 | 20 | ug/kg |
| EPA 8151A | Herbicides, NYSDEC Part 375 Target List | Soil | 2,4,5-TP (Silvex) | 20 | 20 | ug/kg |
| EPA 8151A | Herbicides, NYSDEC Part 375 Target List | Soil | 2,4,5-TP (Silvex) [2C] | 20 | 20 | ug/kg |
| EPA 8151A | Herbicides, NYSDEC Part 375 Target List | Soil | 2,4-D | 20 | 20 | ug/kg |
| EPA 8151A | Herbicides, NYSDEC Part 375 Target List | Soil | 2,4-D [2C] | 20 | 20 | ug/kg |
| EPA 8151A | Herbicides, NYSDEC Part 375 Target List | Water | 2,4,5-T | 5 | 5 | ug/L |
| EPA 8151A | Herbicides, NYSDEC Part 375 Target List | Water | 2,4,5-T [2C] | 5 | 5 | ug/L |
| EPA 8151A | Herbicides, NYSDEC Part 375 Target List | Water | 2,4,5-TP (Silvex) | 5 | 5 | ug/L |
| EPA 8151A | Herbicides, NYSDEC Part 375 Target List | Water | 2,4,5-TP (Silvex) [2C] | 5 | 5 | ug/L |
| EPA 8151A | Herbicides, NYSDEC Part 375 Target List | Water | 2,4-D | 5 | 5 | ug/L |
| EPA 8151A | Herbicides, NYSDEC Part 375 Target List | Water | 2,4-D [2C] | 5 | 5 | ug/L |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Metals** | | | | | | |
| EPA 6010D | Metals, Target Analyte | Soil | Aluminum | 4.17 | 4.17 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Antimony | 2.08 | 2.08 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Arsenic | 1.25 | 1.25 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Barium | 2.08 | 2.08 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Beryllium | 0.042 | 0.042 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Cadmium | 0.25 | 0.25 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Calcium | 4.17 | 4.17 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Chromium | 0.417 | 0.417 | mg/kg |
| EPA 7196A | Metals, Target Analyte | Soil | Hexavalent Chromium | 0.35 | 0.5 | mg/kg |
| EPA 7196A | Metals, Target Analyte | Soil | Trivalent Chromium | 0.25 | 0.5 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Cobalt | 0.333 | 0.333 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Copper | 1.67 | 1.67 | mg/kg |
| EPA 9013A | Metals, Target Analyte | Soil | Cyanide | 0.5 | 0.5 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Iron | 20.8 | 20.8 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Lead | 0.417 | 0.417 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Magnesium | 4.17 | 4.17 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Manganese | 0.417 | 0.417 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Nickel | 0.83 | 0.83 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Potassium | 4.17 | 4.17 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Selenium | 2.08 | 2.08 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Silver | 0.42 | 0.42 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Sodium | 41.7 | 41.7 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Thallium | 2.08 | 2.08 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Vanadium | 0.83 | 0.83 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Soil | Zinc | 2.08 | 2.08 | mg/kg |
| EPA 6010D | Metals, Target Analyte | Water | Aluminum | 0.05 | 0.05 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Antimony | 0.025 | 0.025 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Arsenic | 0.015 | 0.015 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Barium | 0.025 | 0.025 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Beryllium | 0.0005 | 0.0005 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Cadmium | 0.003 | 0.003 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Calcium | 0.05 | 0.05 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Chromium | 0.005 | 0.005 | mg/L |
| EPA 7196A | Metals, Target Analyte | Water | Hexavalent Chromium | 0.01 | 0.01 | mg/L |
| EPA 7196A | Metals, Target Analyte | Water | Trivalent Chromium | 0.008 | 0.01 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Cobalt | 0.004 | 0.004 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Copper | 0.02 | 0.02 | mg/L |
| EPA 9013A | Metals, Target Analyte | Water | Cyanide | 0.01 | 0.01 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Iron | 0.25 | 0.25 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Lead | 0.005 | 0.005 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Magnesium | 0.05 | 0.05 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Manganese | 0.005 | 0.005 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Nickel | 0.01 | 0.01 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Potassium | 0.05 | 0.05 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Selenium | 0.025 | 0.025 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Silver | 0.005 | 0.005 | mg/L |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Metals** | | | | | | |
| EPA 6010D | Metals, Target Analyte | Water | Sodium | 0.5 | 0.5 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Thallium | 0.025 | 0.025 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Vanadium | 0.01 | 0.01 | mg/L |
| EPA 6010D | Metals, Target Analyte | Water | Zinc | 0.025 | 0.025 | mg/L |

| Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|
| **PFAS Compounds** | | | | | |
| PFAS, EPA 1633 Target List | Soil | Perfluorobutanesulfonic acid (PFBS) | 0.111 | 0.177 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluorohexanoic acid (PFHxA) | 0.053 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoroheptanoic acid (PFHpA) | 0.105 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluorohexanesulfonic acid (PFHxS) | 0.179 | 0.183 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluorooctanoic acid (PFOA) | 0.172 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluorooctanesulfonic acid (PFOS) | 0.167 | 0.186 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluorononanoic acid (PFNA) | 0.189 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluorodecanoic acid (PFDA) | 0.191 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoroundecanoic acid (PFUnA) | 0.198 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluorododecanoic acid (PFDoA) | 0.163 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluorotridecanoic acid (PFTrDA) | 0.125 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluorotetradecanoic acid (PFTA) | 0.103 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | N-MeFOSAA | 0.148 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | N-EtFOSAA | 0.194 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoropentanoic acid (PFPeA) | 0.109 | 0.4 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoro-1-octanesulfonamide (FOSA) | 0.146 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoro-1-heptanesulfonic acid (PFHpS) | 0.155 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoro-1-decanesulfonic acid (PFDS) | 0.191 | 0.193 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS) | 0.595 | 0.76 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS) | 0.755 | 0.768 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoro-n-butanoic acid (PFBA) | 0.109 | 0.8 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | 0.139 | 0.356 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoro-3,6-dioxaheptanoic acid (NFDHA) | 0.193 | 0.4 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoro-4-oxapentanoic acid (PFMPA) | 0.062 | 0.4 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoro-5-oxahexanoic acid (PFMBA) | 0.096 | 0.4 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoro-1-pentanesulfonate (PFPeS) | 0.157 | 0.188 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | 1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS) | 0.595 | 0.75 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | HFPO-DA (Gen-X) | 0.608 | 0.8 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | 11CL-PF3OUdS | 0.311 | 0.756 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | 9CL-PF3ONS | 0.246 | 0.748 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | ADONA | 0.174 | 0.756 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluorododecanesulfonic acid (PFDoS) | 0.169 | 0.194 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | Perfluoro-1-nonanesulfonic acid (PFNS) | 0.124 | 0.192 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | 3-Perfluoropropyl propanoic acid (FPrPA) | 0.634 | 1 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | 3-Perfluoropentyl propanoic acid (FPePA) | 2.1 | 5 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | 3-Perfluoroheptyl propanoic acid (FHpPA) | 1.5 | 5 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | N-MeFOSE | 0.611 | 2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | N-MeFOSA | 0.18 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | N-EtFOSE | 0.697 | 2 | ug/kg |
| PFAS, EPA 1633 Target List | Soil | N-EtFOSA | 0.198 | 0.2 | ug/kg |
| PFAS, EPA 1633 Target List | Water | Perfluorobutanesulfonic acid (PFBS) | 0.47 | 1.77 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluorohexanoic acid (PFHxA) | 0.35 | 2 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoroheptanoic acid (PFHpA) | 0.71 | 2 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluorohexanesulfonic acid (PFHxS) | 0.68 | 1.83 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluorooctanoic acid (PFOA) | 0.42 | 2 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluorooctanesulfonic acid (PFOS) | 0.82 | 1.86 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluorononanoic acid (PFNA) | 0.52 | 2 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluorodecanoic acid (PFDA) | 0.75 | 2 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoroundecanoic acid (PFUnA) | 1.13 | 2 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluorododecanoic acid (PFDoA) | 0.88 | 2 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluorotridecanoic acid (PFTrDA) | 0.74 | 2 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluorotetradecanoic acid (PFTA) | 0.69 | 2 | ng/L |

| Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|
| **PFAS Compounds** | | | | | |
| PFAS, EPA 1633 Target List | Water | N-MeFOSAA | 0.79 | 2 | ng/L |
| PFAS, EPA 1633 Target List | Water | N-EtFOSAA | 1.03 | 2 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoropentanoic acid (PFPeA) | 0.23 | 4 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoro-1-octanesulfonamide (FOSA) | 0.88 | 2 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoro-1-heptanesulfonic acid (PFHpS) | 0.91 | 1.91 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoro-1-decanesulfonic acid (PFDS) | 1.32 | 1.93 | ng/L |
| PFAS, EPA 1633 Target List | Water | 1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2 FTS) | 1.06 | 7.6 | ng/L |
| PFAS, EPA 1633 Target List | Water | 1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS) | 2.05 | 7.68 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoro-n-butanoic acid (PFBA) | 0.33 | 8 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | 0.5 | 3.56 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoro-3,6-dioxaheptanoic acid (NFDHA) | 2.14 | 4 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoro-4-oxapentanoic acid (PFMPA) | 0.25 | 4 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoro-5-oxahexanoic acid (PFMBA) | 0.37 | 4 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoro-1-pentanesulfonate (PFPeS) | 0.76 | 1.88 | ng/L |
| PFAS, EPA 1633 Target List | Water | 1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2 FTS) | 1.79 | 7.5 | ng/L |
| PFAS, EPA 1633 Target List | Water | HFPO-DA (Gen-X) | 3.23 | 8 | ng/L |
| PFAS, EPA 1633 Target List | Water | 11CL-PF3OUdS | 1.38 | 7.56 | ng/L |
| PFAS, EPA 1633 Target List | Water | 9CL-PF3ONS | 0.7 | 7.48 | ng/L |
| PFAS, EPA 1633 Target List | Water | ADONA | 0.53 | 7.56 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluorododecanesulfonic acid (PFDoS) | 0.93 | 1.94 | ng/L |
| PFAS, EPA 1633 Target List | Water | Perfluoro-1-nonanesulfonic acid (PFNS) | 0.86 | 1.92 | ng/L |
| PFAS, EPA 1633 Target List | Water | 3-Perfluoropropyl propanoic acid (FPrPA) | 2.03 | 5 | ng/L |
| PFAS, EPA 1633 Target List | Water | 3-Perfluoropentyl propanoic acid (FPePA) | 7.33 | 25 | ng/L |
| PFAS, EPA 1633 Target List | Water | 3-Perfluoroheptyl propanoic acid (FHpPA) | 9.47 | 25 | ng/L |
| PFAS, EPA 1633 Target List | Water | N-MeFOSE | 3.99 | 20 | ng/L |
| PFAS, EPA 1633 Target List | Water | N-MeFOSA | 1.58 | 2 | ng/L |
| PFAS, EPA 1633 Target List | Water | N-EtFOSE | 3.99 | 20 | ng/L |
| PFAS, EPA 1633 Target List | Water | N-EtFOSA | 1.8 | 2 | ng/L |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,1,1,2-Tetrachloroethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,1,1-Trichloroethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,1,2,2-Tetrachloroethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,1,2-Trichloroethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,1-Dichloroethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,1-Dichloroethylene | 0.025 | 0.025 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,2,4-Trichlorobenzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,2,4-Trimethylbenzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,2-Dibromoethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,2-Dichlorobenzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,2-Dichloroethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,2-Dichloropropane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,2-Dichlorotetrafluoroethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,3,5-Trimethylbenzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,3-Butadiene | 0.3 | 0.3 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,3-Dichlorobenzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,3-Dichloropropane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,4-Dichlorobenzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 1,4-Dioxane | 0.2 | 0.2 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 2-Butanone | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 2-Hexanone | 0.2 | 0.2 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 3-Chloropropene | 0.5 | 0.5 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | 4-Methyl-2-pentanone | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Acetone | 0.2 | 0.2 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Acrolein | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Acrylonitrile | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Benzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Benzyl chloride | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Bromodichloromethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Bromoform | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Bromomethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Carbon disulfide | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Carbon tetrachloride | 0.025 | 0.025 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Chlorobenzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Chloroethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Chloroform | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Chloromethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | cis-1,2-Dichloroethylene | 0.025 | 0.025 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | cis-1,3-Dichloropropylene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Cyclohexane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Dibromochloromethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Dichlorodifluoromethane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Ethanol | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Ethyl acetate | 0.2 | 0.2 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Ethyl Benzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Hexachlorobutadiene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Isopropanol | 0.2 | 0.2 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Isopropylbenzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Methyl Methacrylate | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Methyl tert-butyl ether (MTBE) | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Methylene chloride | 0.2 | 0.2 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Naphthalene | 0.2 | 0.2 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | n-Butylbenzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | n-Heptane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | n-Hexane | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | n-Propylbenzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | o-Xylene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | p- & m- Xylenes | 0.2 | 0.2 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | p-Ethyltoluene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | p-Isopropyltoluene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Propylene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | sec-Butylbenzene | 0.1 | 0.1 | ppbv |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Styrene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | tert-Butylbenzene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Tetrachloroethylene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Tetrahydrofuran | 0.2 | 0.2 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Toluene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | trans-1,2-Dichloroethylene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | trans-1,3-Dichloropropylene | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Trichloroethylene | 0.025 | 0.025 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Trichlorofluoromethane (Freon 11) | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Vinyl acetate | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Vinyl bromide | 0.1 | 0.1 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Vinyl Chloride | 0.05 | 0.05 | ppbv |
| EPA TO-15 | Volatile Organics, EPA TO15 Full List | Air | Xylenes, Total | 0.3 | 0.3 | ppbv |

| Specific Method | Analysis | Matrix | Analyte | MDL | RL | Units |
|---|---|---|---|---|---|---|
| **Volatile Organic Compounds** | | | | | | |
| EPA TO-15 | VOA, TO15 Isooctane (2,2,4-TMP) Add On | Air | 2,2,4-Trimethylpentane | 0.025 | 0.05 | ppbv |

# ATTACHMENT C

# ANALYTICAL METHODS/QUALITY ASSURANCE SUMMARY TABLE

**ATTACHMENT C**

**ANALYTICAL METHODS/QUALITY ASSURANCE SUMMARY TABLE**

| Matrix Type | Field Parameters | Laboratory Parameters | Analytical Methods | Sample Preservation | Sample Container Volume and Type | Sample Hold Time | Field Duplicate Samples | Equipment Blank Samples | Trip Blank Samples | Ambient Air Samples | MS/MSD Samples |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Groundwater** | Temperature, Turbidity, pH, ORP, Conductivity | Part 375 + TCL VOCs | EPA 8260C | Cool to 4°C; HCl to pH <2;no headspace | Three 40-mL VOC vials with Teflon®-lined cap | Analyze within 14 days of collection | 1 per 20 samples (minimum 1) | 1 per 20 samples (minimum 1) | 1 per shipment of VOC samples | NA | 1 per 20 samples |
| | | 1,4-dioxane | 8270D SIM isotope dilution | Cool to 4°C | One 1-Liter Amber Glass | 7 days to extract, 40 days after extraction to analysis | | | | | |
| | | Part 375 + TCL SVOCs | EPA 8270D | Cool to 4°C | Two 1-Liter Amber Glass | 7 days to extract, 40 days after extraction to analysis | | | | | |
| | | Part 375 + TAL Metals | EPA 6020B, EPA 7470A | Cool to 4°C; $HNO_3$ | 250 ml plastic | 6 months, except Mercury 28 days | | | | | |
| | | Hexavalent Chromium | EPA 7196A | Cool to 4°C | 250 ml plastic | 24 hours | | | | | |
| | | Cyanide | EPA 9010C/9012B | Cool to 4°C; NaOH plus 0.6g ascorbic acid | 250 ml plastic | 14 days | | | | | |
| | | Part 375 + TCL Herbicides | EPA 8151A | Cool to 4°C | Two 1-Liter Amber Glass | 7 days to extract, 40 days after extraction to analysis | | | | | |
| | | Part 375 + TCL Pesticides | EPA 8081B | Cool to 4°C | Two 1-Liter Amber Glass for Pesticides/PCB | 7 days to extract, 40 days after extraction to analysis | | | | | |
| | | Part 375 + TCL PCBs | EPA 8082A | Cool to 4°C | | 7 days to extract, 40 days after extraction to analysis | | | | | |
| | | Per- and polyfluoroalykl substances (PFAS) | EPA 537(M) Rev 1.1 | Cool to 4°C, Trizma | One 8-oz pre-certified PFAS-free plastic container | 14 days | 1 per 20 samples (minimum 1) | 1 per 20 samples (minimum 1) | NA | NA | 1 per 20 samples (minimum 1) |

**ATTACHMENT C**

**ANALYTICAL METHODS/QUALITY ASSURANCE SUMMARY TABLE**

| Matrix Type | Field Parameters | Laboratory Parameters | Analytical Methods | Sample Preservation | Sample Container Volume and Type | Sample Hold Time | Field Duplicate Samples | Equipment Blank Samples | Trip Blank Samples | Ambient Air Samples | MS/MSD Samples |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Soil** | Total VOCs via PID | Part 375 + TCL VOCs | EPA 8260C | Cool to 4°C | Two 40-ml VOC vials with 5ml $H_2O$, one with MeOH or 3 En Core Samplers (separate container for % solids) | 48 hours after sampling if samples are not frozen to -7° C, 14 days after extraction to analysis | 1 per 20 samples (minimum 1) | 1 per 20 samples (minimum 1) | 1 per shipment of VOC samples | NA | 1 per 20 samples |
| | | Part 375 + TCL SVOCs | EPA 8270D | Cool to 4°C | 4 oz. amber glass jar | 14 days extract, 40 days after extraction to analysis | | | NA | | |
| | | Part 375 + TAL Metals | EPA 6010D, EPA 7471B, EPA 7196A, EPA 9010C/9012B | Cool to 4°C | 2 oz. amber glass jar | 6 months, except mercury 28 days | | | | | |
| | | Hexavalent Chromium | EPA 7196A | Cool to 4°C | 4 oz. amber glass jar | 30 days | | | | | |
| | | Cyanide | EPA 9010C/9012B | Cool to 4°C | 8 oz. amber glass jar | 14 days | | | | | |
| | | Part 375 + TCL Pesticides | EPA 8081B | Cool to 4°C | 4 oz. amber glass jar | 14 days extract, 40 days after extraction to analysis | | | | | |
| | | Part 375 + TCL Herbicides | EPA 8151A | Cool to 4°C | 8 oz. amber glass jar | 14 days | | | | | |
| | | Part 375 + TCL PCBs | EPA 8082A | Cool to 4°C | 4 oz. amber glass jar | 14 days extract, 40 days after extraction to analysis | | | | | |
| | | Per- and polyfluoroalykl substances (PFAS) | EPA 537(M) Rev 1.1 | Cool to 4°C, Trizma | Two 250 mL high density polyethylene (HDPE) bottles | 14 days | | | | | |
| **Soil Vapor** | Total VOCs and Methane with MultiGas Meter | TO-15 Listed VOCs | TO-15 | Ambient Temperature | 6-Liter Summa Canister | Analyze within 30 days of collection | 1 per 20 samples (minimum 1) | NA | NA | 1 per 10 samples (minimum 1) | NA |
| **Ambient Air** | Total VOCs via PID | TO-15 Listed VOCs | TO-15 | Ambient Temperature | 6-Liter Summa Canister | Analyze within 30 days of collection | 1 per 20 samples (minimum 1) | NA | NA | 1 per 10 samples (minimum 1) | NA |

**Notes:**

1. PID - Photoionization Detector
2. VOC - Volatile organic compound
3. EPA - Environmental Protection Agency
4. TCL - Target compound list
5. TAL - Target analyte list
6. ORP - Oxidation-reduction-potential
7. NA - Not applicable

# ATTACHMENT D

# SAMPLE NOMENCLATURE

SOP #01 – Sample Nomenclature

## INTRODUCTION

The Langan Environmental Group conducts an assortment of site investigations where samples (Vapor, Solids, and Aqueous) are collected and submitted to analytical laboratories for analysis. The results of which are then evaluated and entered into a data base allowing quick submittal to the state regulatory authority (New York State Division of Environmental Conservation [NYSDEC]). In addition, Langan is linking their data management system to graphic and analytical software to enable efficient evaluation of the data as well as creating client-ready presentational material.

## SCOPE AND APPLICATION

This Standard Operating Procedure (SOP) is applicable to the general framework for labeling vapor, solid (soil) and aqueous (groundwater) samples that will be submitted for laboratory analysis. The nomenclature being introduced is designed to meet the NYSDEC EQuIS standard and has been incorporated into Langan software scripts to assist project personnel in processing the data. While this SOP is applicable to all site investigation; unanticipated conditions may arise which may require considerable flexibility in complying with this SOP. Therefore, guidance provided in this SOP is presented in terms of general steps and strategies that should be applied; but deviation from this SOP must be reported to the Project Manager (PM) immediately.

## GENERAL SAMPLE IDENTIFICATION CONSIDERATIONS

### Sample Labels

All sample ware must have a label. Recall that when you are using the Encore™ samples (see below); they are delivered in plastic lined foil bags. You are to label the bags[1]:



All other samples containers including Terra Cores™ must be labeled with laboratory provided self-adhesive labels.

### Quick Breakdown of Sample Format

The general format for sample nomenclature is:

[1]Both Alpha and York laboratories permit the combining of the three Encore™ into a single bag. This may not be appropriate for all laboratories so please confirm with the labs themselves

**LLNN_ID**

Where

***LL*** is a grouping of two (2) to four (4) letters signifying the sample media source. In older nomenclature SOPs this portion of the sample identification is commonly referred to as the *Sample Investigation Code*

***NN*** represents a two digit number identifying the specific sample location or sample sequence number

_ ***(underscore)*** is required between the sample lettering and numeric identification and additional modifying data that determines the date of sampling or the depth of the sample interval

***ID*** is a modifier specific to the sample type media (depth of soil sample or date of groundwater sample)

**LL – Sample Investigation Code**

Langan has devised a list of two to four letters to insure a quick ability to identify the sample investigation.

| Code | Investigation |
|---|---|
| AA | Ambient Air |
| DS | Drum |
| EPB | Endpoint Location - Bottom (Excavation) |
| EPSW | Endpoint Location - Sidewall (Excavation) |
| FP | Free Product |
| IA | Indoor Air |
| IDW | Investigation Derived Waste (Soil Pile) |
| MW | Monitoring Well (Permanent) |
| SB | Soil Boring |
| SG | Staff Gauge (Stream Gauging) |
| SL | Sludge |
| SV | Soil Vapor Point |
| SVE | Soil Vapor Extraction Well |
| SW | Surface Water |
| TMW | Temporary Monitoring Well |
| TP | Test Pit (Excavated Material from Test Pit Not Associated With Sidewall or Bottom Samples) |
| WC | Waste Characterization Boring |
| COMP | Composite Sample |
| TB | Trip Blank (QA/QC Sampling – All Investigations) |
| FB | Field Blank (QA/QC Sampling – All Investigations) |
| DUP | Duplicate (QA/QC Sampling – All Investigations) |

**NN – Numeric Identifier**

The two digit number that follows the sample investigation code (LL) identifies the specific sample based on the soil boring, monitoring well, endpoint or other location identification. For a subset of samples

where there is no specific location identifier, the two digit number is the sequence number for the sample submitted. For example, an aqueous sample from a monitoring well identified as MW-1 would have the sample investigation code of MW and the numeric identifier as 01. Note there is no hyphen. The same can be done for soil borings, a soil sample collected from soil boring 9 (SB-9) would be have the LLNN identification of SB09 (again, no hyphen).

Note however that there is a subset of samples related to laboratory analytical quality assurance, among these includes TB, FB, and DUP. On many investigations, the Scope will require multiple collections of these types of samples, therefore the numerical number represents the sequence sample count where the first sample is 01, the second sample is 02, and the third sample is 03 and so on.

**_ Underscore**
The underscore is required. It separates the investigation code and numeric identifier from the modifier specific to the sample itself. Note that every effort should be made to insure that the underscore is clear on the sample label and chain of custody (COC).

**ID – Modifier Specific to Type Media**
Each sample investigation code and numeric identifier is further modified by an ID specific to the sample type media. In general, soil samples (soil borings or endpoint samples) use an ID that indicates the depth at which the sample was taken. Aqueous samples (groundwater or surface water samples) are identified by the date the sample was collected. Other types of samples including quality control (TB, FB, and DUP), Vapor samples (AA, IA, SV or SVE), other soil type samples (IDW, sludge, free product, drum, and others) are also identified by a date. The following rules apply to the ID when using sample depth or sample date.

*Sample Depth*
The sample depth must be whole numbers (no fractions) separated by a hyphen. Thus for a soil sample collected from the soil boring SB-1 from a depth of 6 feet to 8 feet, the sample would be identified as:

SB01_6-8

Unfortunately, the NYSDEC EQuIS system does not accept fractions. Therefore, if your sample interval is a fraction of a foot (6.5-7.5), round up to the larger interval (6-8).

*Sample Date*
The sample date is always in the format of MMDDYY. Note that the year is two digits. Thus for a groundwater sample collected on July 1, 2015 from the monitoring well MW-1, the sample would be identified as:

MW01_070115

**Special Cases**
There are a couple of specific sample types that require further explanation.

*Endpoint Sampling*
End point sidewall samples are sometimes modified by magnetic direction (N, S, E, and W). For example, the first sidewall endpoint sample from the north wall of an excavation at a depth of 5 feet would be written as:

EPSW01_N_5

Again, note that the N in the identification refers to north and is separated from the prefix investigation code/numeric identifier and ID modifier suffix by underscores.

*Vapor Extraction Well Sample*
As with the sidewall endpoint samples, the sample name is altered by inserting a middle modifier between the prefix and suffix of the sample name. The middle modifier is used to identify the source of the sample (inlet sample port, midpoint sample port or outlet sample port). For example the midpoint port of the vapor extraction well number 1 sampled on July 1, 2015 would be written as;

SVE01_MID_070115

*Matrix Spike and Matrix Spike Duplicate*
On occasion, a Langan investigation will collect a sample to be used to provide the lab with a site specific medium to spike to determine the quality of the analytical method. This special case of sampling requires additional information to be used in the sample name, specifically, a suffix specifying whether the sample is the matrix spike (MS) or the matrix spike duplicate (MSD). In the following example, the sample is collected from soil boring number 1 at a depth of 2-4 feet. For the matrix spike sample:

SB01_2-4_MS

and for the matrix spike duplicate sample:

SB01_2-4_MSD

*Multiple Interval Groundwater Sampling*
Although not currently a common practice, low flow sampling facilitates stratigraphic sampling of a monitoring well. If the scope requires stratigraphic sampling then groundwater samples will be labeled with a lower case letter following the well number. For example, placing the pump or sampling tube at 10 feet below surface in MW01 on July 1, 2015 would require the sample to be labeled as:

MW01a_070115

While a second sample where the pump or tubing intake is placed at 20 feet would be labeled as:

MW01b_070115

Note that it is important that you record what depth the intake for each sample represents in your field notes; as this information is going to be critical to interpreting the results.

# ATTACHMENT E

# PFAS SAMPLING SOP

# SOP #19: BEST PRACTICES FOR PFAS SAMPLING OF GROUNDWATER – APRIL 2019

This discussion is about best practices to assist you in groundwater sampling for Per- and Poly-Fluoro Alkyl Substances (PFAS). The current discussion surrounding PFAS sampling is long on assumption and short on research. As such, the best guidance is a discussion of best practices. Please review PFAS Sampling Best Practices (PFAS-SBP) in planning and implementing PFAS sampling activities. As more information becomes available, this best practices document will be updated. Be sure you are reviewing the most recent version when planning PFAS sampling activities. Copies of best practices will be stored on the server at \\langan.com\data\NYC\other\environmental group\SOPs\12 Low Flow Groundwater Sampling\PFAS Best Practices.

This version of PFAS-SBP will briefly discuss field safety and personal protection equipment (PPE), clothing and personal hygiene, sampling equipment, sampling documentation and labeling, and sampling procedure:

## Safety:

Staff safety is still paramount. The following equipment must be donned at PFAS sampling events – no exceptions.

- All sites
  - Safety Glasses
  - Powderless Nitrile (no latex)
  - Safety Shoes – Note that safety shoes are commonly treated to be water-resistant or water proof with a PFAS type material, therefore, staff must don natural rubber overboots.



*Figure 1 ONGUARD Disposable Natural Rubber Overshoe (Part No. 97591LG00 [large])*[1]

[1] Available in the environmental closet

- Construction Sites
    - Langan Hardhat
    - Langan reflective vest (yellow reflective jacket not permitted for PFAS sampling)
    - Hearing protection as required.

**Clothing and Personal Hygiene**

As a first approximation, any clothing advertised as waterproof, water-repellant, or dirt and/or stain resistant should not be donned for PFAS sampling activities. In addition, clothing designed to block ultraviolet protection should also be avoided. Fabric Softeners and ant-static ingredients in clothing detergents should also be avoided.

Clothing from synthetic and natural fibers (cotton) are acceptable, as a precaution, do not wear new clothing into the field. Plain uncoated Tyvek™ is acceptable for use when sampling as it does not contain PFAS. Coated Tyvek™ is not acceptable as the suits are usually treated with PFAS type material unless deemed necessary with no alternative PPE from a health and safety perspective.

When sampling in cold weather, consider layers for warmth since most jackets are treated with waterproofing material. However, in the event of wet weather, please use the PVC rain gear (e.g. River City Garment 3-piece Rain Gear 35mm PVC/polyester suits [Part no. 5500009600 {large}]).[2]

The literature abounds with differing recommendations regarding personal hygiene products. In general, avoid hair and body wash products that include conditioning agents. Most important, if you have long hair, pin it back to avoid having to touch your hair with your hands during sampling activities.

There is a limited number of products available to meet field insect repellent (insect repellent with Deet or derived from100% organic ingredients) and sunscreen requirement when sampling for PFAS. A list of suitable products will be provided as they become available. When using approved insect repellent and sunscreen products, be sure to apply away from the sampling area and to wash your hands after applying.

As a side note, do not eat or consume beverages during sampling activities. When drinking beverages to avoid dehydration, do so away from the sampling area and remove your nitrile gloves. Don a new set of gloves after consuming the beverage. Consume all meals away from the sampling area, use wax paper where possible to wrap your meal. If purchasing your meal,

[2] Available in the environmental closet

consume off-site and wash your hand thoroughly after your meal to prevent transference of potential PFAS compounds from food packaging.

## Sampling Equipment

- Pumps – In general, pumps (and other sampling equipment including the Solinst interface probe) having parts containing fluoropolymer and should be avoided where possible. The following pumps are acceptable.
    - Peristaltic is the best option when depth to water is less than 20-feet.
    - Bladder pumps (QED Sample Pro, or equivalent[3]) are the only currently available option to sample for PFAS when depth to water is greater than 20-feet.
    - Inertial pumps (Waterra, or equivalent) while suitable for PFAS sampling are not to be used because they are very difficult to operate within the proscribed flow rate defined in low flow sampling guidances. They also are unsuitable for VOC sampling if the sampling plan is coupled with traditional analytes.
    - *Three are no other submersible pumps (including Monsoon pumps) that have preliminary data to substantiate being PFAS-free and are readily available*.
- Tubing – In general, tubing containing fluoropolymers are prohibited.
    - Silicon tubing if permitted
    - High-density polyethylene (HDPE) tubing is permitted
    - Low-density polyethylene (LDPE) tubing is permissible by the US Navy and a limited number of other agencies (Michigan) but is still considered questionable by many state and local authorities including the NYSDEC. Therefore, its use should only be considered when an alternative is not available and prior approval from project managers and potentially regulators may be necessary. Further additional QA/QC samples are suggested when using this material.
- Note passive samples such as HydraSleeve samplers (made from LDPE) may be an option; however, regulatory approval should be obtained prior to sampling and may require additional QA/QC to prove they do not bias or effect sample results.
- If a piece of equipment containing fluoropolymer parts must be used (depth to water probes or interface probes (e.g. Solinst) or an acceptable alternative cannot be found, an equipment blank of that piece of equipment should be submitted for analysis as a QA/QC measure.

## Sampling Documentation and Labeling

Documentation remains extremely important. There are general rules that apply to PFAS sampling:

[3] QED has provided company run test results demonstrating the Sample Pro is PFAS-free, currently there is no independent testing on sampling equipment. Only use pumps that have some laboratory basis for being PFAS-free.

- Use ballpoint pens and pencils to complete labels and record field notes. There is no consensus of Sharpie® markers, therefore, avoid completing labels with anything but ballpoint pens.
- Aluminum, Masonite and polypropylene (including Langan) clipboards are suitable for holding loose papers.
- There is no consensus around the suitability of "Rite-in-Rain"™ notebooks on PFAS sampling sites. Some states including Michigan do permit them but not the U.S. Navy. Until further information is available, do not use any types of waterproof field books during PFAS sampling. If you have a field map anointed with post-its, transfer the information to the map. Post-it, or any other adhesive paper pad is not suitable for PFAS sampling sites. Only use loose paper for written note taking.
- Standard practice should be to use a Langan tablet with the low flow sampling spreadsheet preloaded. It is recommended that you print out a number of hard copies of the spreadsheet should the tablet fail.
- Use lab supplied labels only.

**Sampling Procedure**

Langan will follow standard low flow procedures and stability criteria when sampling for PFAS. This applies to those sampling events where only PFAS is being evaluated as well as when traditional sampling follows PFAS sampling. Note that when doing combined sampling events (PFAS and traditional analytes), sample for PFAS first. Where possible every effort should be made to use disposal and dedicated equipment for each sample location to avoid potential cross contamination and limit errors and issues from inadequate decontamination between samples.

Gauging

Gauging data will not be collected on monitoring wells subject to PFAS sampling. As stated, the Solinst interface probe is not suitable for gauging depth to water during PFAS sampling. However, prior to the field event, field staff, senior staff and the PM will discuss an alternative strategy to collect site wide synoptic groundwater gauging data after PFAS sampling is completed.

Decon Station

Use the three bucket procedure for decontaminating the bladder pump prior to sampling the first monitoring well and directly before each subsequent well. All the buckets should be filled with DI water supplied by the lab and confirmed to be PFAS-free. In some instances, the lab may be unable or unwilling to supply the quantities of PFAS-free water necessary for

decontamination. If the lab will not supply the volume required, use the DI water supplied by Pine and submit a blank analysis of the decon water with your QA/QC samples. Alconox®, Liquinox® or Citranox® are the only decontamination solutions currently cleared for sampling PFAS. On sites where PFAS sampling is scheduled over multiple days, have enough proper decon water to mix a new solution each day. Decontaminating the night before is not acceptable.

Ideally, the decon station should be set up on thin plastic sheeting; but the only material available is LDPE. As such, the best practice is to lay out the LDPE sheet, then cover the work area with clean cotton rags (environmental closet) to place the decontaminated bladder pump on. Avoid placing the pump or any of its parts directly on the plastic. Also submit a rinse sample - separate from the field blank, with your QA/QC samples.

Sampling Set Up

At each step during set up and sampling, best practices require changing nitrile gloves between each step. Remember, any time you do something out of procedure such as writing a field note, answering the phone or pushing your hair aside, you risk transference unless you change gloves.

Stage the pump supporting equipment (compressor, battery, etc.), buckets, water quality meter (Horiba), lab coolers and other equipment at least 5-feet away from the open wellhead. Do not stage any unnecessary equipment or cases near the wellhead during sampling. If it isn't directly related to sampling the well in question, leave it staged in a central area away from the wellheads.

When inserting the tubing into the well, it's important to keep the tubing that will come in contact with the water table from coming into contact with the surrounding platform (concrete/asphalt/soil apron around the well) which can serve as a source of transference. This is especially difficult when using HDPE tubing. The best method is to patiently unroll off your arm into the well. Use PVC cutters to cut the tubing.

Connect the tubing to the water quality meter through a bridge of silicon tubing. This will give a bit of extra flexibility in setting up, especially on cold days.

Stability

There are two important items to remember during the period when you are tracking stability:

- Do not allow the pump to stop, backflow from the water quality meter can pose a

significant risk of cross contamination. If you must shut down, disconnect the pump to water quality meter feed line before turning off the pump.

- While you can fill out the labels (remember to change gloves), do not set up the sample bottles until you are ready to sample.

Sampling

- Once stability is achieved (or an hour has passed), change gloves again, then pull the pump to water quality meter tubing from the water quality meter, change gloves and begin collecting the samples.
- At a minimum, the PFAS sample bottles must be filled to container neck. Do not under fill.



- After sampling groundwater, you can allow the tubing to discharge to a bucket while you set up for PFAS field blanks. Change gloves, then prepare the field blanks.
    - Transfer the reagent water from the filled plastic container to the field blank container;
    - Both the empty Reagent Water container and the filled Field Blank container must be returned to the lab along with the samples taken.
- If the work plan is for sampling the standard suite of analytes (VOCs, SVOCs, etc.), then commence collecting those samples after completing the PFAS and PFAS field blank sampling.

Post Sampling

Place all disposable sampling material (tubing, discarded gloves, etc.) in a heavy duty garbage bag (environmental closet). Move pump to decon area. If using a bladder pump, decontaminate per instructions above. If using a peristaltic pump, change the silicon pump tubing using a new set of nitrile gloves. Then proceed to the next monitoring well location.

## SOP 18 – BEST PRACTICES FOR PFAS SAMPLING IN SOIL – APRIL 2019

This discussion is about best practices to assist you in soil sampling for Per- and Poly-Fluoro Alkyl Substances (PFAS). Similar to groundwater sampling for PFAS, the current discussion surrounding PFAS sampling is long on assumption and short on research. As such, the best guidance is a discussion of best practices. Please review PFAS Sampling Best Practices (PFAS-SBP) in planning and implementing PFAS sampling activities. As more information becomes available, this best practices document will be updated. Be sure you are reviewing the most recent version when planning PFAS sampling activities. Copies of best practices will be stored on the server at \\langan.com\data\NYC\other\environmental group\SOPs\19 Best Practices for PFAS Sampling Soil.

This version of PFAS-SBP will briefly discuss field safety and personal protection equipment (PPE), clothing and personal hygiene, sampling equipment, sampling documentation and labeling, and sampling procedure:

**Safety:**

Staff safety is still paramount. The following equipment must be donned at PFAS sampling events – no exceptions.

- All sites
  - Safety Glasses
  - Powderless Nitrile (no latex)
  - Safety Shoes – Note that safety shoes are commonly treated to be water-resistant or water proof with a PFAS type material, therefore, staff must don natural rubber overboots.



*Figure 1 ONGUARD Disposable Natural Rubber Overshoe (Part No. 97591LG00 [large])*

- Construction Sites

[1] Available in the environmental closet

- Langan Hardhat
- Langan reflective vest, avoid yellow reflective jacket)
- Hearing protection as required.

Daily field notes should list the PPE donned when soil sampling.

**Clothing and Personal Hygiene**

As a first approximation, any clothing advertised as waterproof, water-repellant, or dirt and/or stain resistant should not be donned for PFAS sampling activities. In addition, clothing designed to block ultraviolet protection should also be avoided. Fabric Softeners and ant-static ingredients in clothing detergents should also be avoided.

Clothing from synthetic and natural fibers (cotton) are acceptable, as a precaution, do not wear new clothing into the field. Plain uncoated Tyvek™ is acceptable for use when sampling as it does not contain PFAS. Coated Tyvek™ is not acceptable as the suits are usually treated with PFAS type material unless deemed necessary with no alternative PPE from a health and safety perspective.

When sampling in cold weather, consider layers for warmth since most jackets are treated with waterproofing material. However, in the event of wet weather, please use the PVC rain gear (e.g. River City Garment 3-piece Rain Gear 35mm PVC/polyester suits [Part no. 5500009600 {large}]).[2]

The literature abounds with differing recommendations regarding personal hygiene products. In general, avoid hair and body wash products that include conditioning agents. Most important, if you have long hair, pin it back to avoid having to touch your hair with your hands during sampling activities.

There is a limited number of insect repellent and sunscreen products available in the marketplace that are suitable to don when sampling for PFAS. As of now, insect repellent with Deet or derived from100% organic ingredients material and water repellent sunscreen (as opposed to those advertised as withstanding a dip in a pool or will not succumb to sweat) are suitable for field work. A list of suitable products will be provided as they become available. When using approved insect repellent and sunscreen products, be sure to apply away from the sampling area and to wash your hands after applying.

As a side note, do not eat or consume beverages during sampling activities. When drinking

[2] Available in the environmental closet

beverages to avoid dehydration, do so away from the sampling area and remove your nitrile gloves. Don a new set of gloves after consuming the beverage. Consume all meals away from the sampling area, use wax paper where possible to wrap your meal. If purchasing your meal, consume off-site and wash your hand thoroughly after your meal to prevent transference of potential PFAS compounds from food packaging.

**Drilling/Excavation Equipment**

The principal of preventing cross contamination and the greatest challenge to sampling soil for PFAS compounds is the field practices of the drilling or excavation contractor. Currently, literature searches have not yielded insights into soil sampling for PFAS compounds. There is an equally lack of information on potential interference drilling and excavation practices can impact on PFAS analytical data. As such, the approach with regards to the drilling or excavation contractor is to insure they rigorously follow the approved decontamination practice. Attempting to implement additional controls on the drillers and excavation contractor at this time without significant independent assessment or refereed literature will undoubtable added significant additional cost with little substantiated benefit. Langan should modify the quality assurance/quality control (QA/QC) sampling to provide a context for assessing the resulting analytical PFAS soil data.

**Sampling Equipment**

When sampling soil for PFAS compounds, Langan's responsibility is to initiate a soil sampling protocol that prevents the cross contamination of soil from the moment the open direct push liner or split spoon is put under the field staff's preview. The bullets below specify several key components:

- Langan field staff should change out nitrile gloves with each liner;
- The putty knife or other tool being used in assessing volatile organic compounds (VOCs) in soil by creating a slice in the sample soil column must be thoroughly decontaminated with each liner;
- Prior to further disturbance of the recovered soil column for soil description, the grab sample for volatile organic compounds (VOCs) should be collected from that segment of the soil sample column exhibiting the highest PID in accordance with the requirements of the work plan;
- In addition and also prior to further disturbance of the recovered soil compound, the soil samples being submitted for analysis of PFAS compounds should be collected in such a manner that it doesn't include samples previously disturbed for assessing PID or collecting the grab samples for VOCs. Remember to follow the requirements of the work plan. Note that the sampler should change out nitrile gloves between collected

the grab sample for VOCs and the collecting the sample for PFAS.

- After collecting the grab sample for VOCs and the sample for PFAS compounds, Langan staff may proceed with the detail soil identification following Langan standards outlined in the Langan Field Investigation and Sampling Manual and instructions given in the Soil Identification Practical training; and
- After completing the soil identification description, Langan staff may proceed with collecting the remaining require soil samples in accordance with the work plan.

**Sampling Documentation and Labeling**

Documentation remains extremely important. There are general rules that apply to PFAS sampling:

- Use ballpoint pens and pencils to complete labels and record field notes. There is no consensus of Sharpie® markers, therefore, avoid completing labels with anything but ballpoint pens;
- Aluminum, Masonite and polypropylene (including Langan) clipboards are suitable for holding loose papers;
- There is no consensus around the suitability of "Rite-in-Rain"™ notebooks on PFAS sampling sites. Some states including Michigan do permit them but not the U.S. Navy. Until further information is available, avoid completing filling out any types of waterproof field books in the vicinity of the PFAS sampling. If you have a field map anointed with post-its, transfer the information to the map. Post-it, or any other adhesive paper pad is not suitable for PFAS sampling sites. Only use loose paper for written note taking; and
- Use lab supplied labels only.

**Quality Assurance/Quality Control Sampling**

A critical factor in understanding the soil analytical PFAS data is to gauge the possibility of interference. As such, the QA/QC requirements as they pertain to soil sampling might require modification. Best practices recommends the following:

- Duplicate soil samples for PFAS should be collected at the same rate as duplicate sampling for other parameters;
- Spike Matrix Sampling and Duplicate Spiked Matrix sampling should be collected at the same rate as similar sampling for other parameters;
- Separate PFAS Field Blanks should be incorporated into the Soil Field Blank Sampling program;
- The source of the driller rinse water (truck mounted tank or local water supply faucet)

should be sampled for PFAS analysis;

- A rinse sample collected from the cutting head of the sampling equipment should be collected for PFAS analysis following decontamination;
- The source of rinse water for the Langan decontamination process should also be collected for PFAS analysis;
- A rinse sample collected from the tool used to manipulate soil samples during PID assessment should also be submitted for PFAS analysis; and
- When preparing the PFAS field blank sample, remember to change gloves, then prepare the field blanks.
    - Transfer the reagent water from the filled plastic container to the field blank container;
    - Both the empty Reagent Water container and the filled Field Blank container must be returned to the lab along with the samples taken.

Post Sampling

Place all disposable sampling material in a heavy duty garbage bag (environmental closet). Move reusable sampling equipment to the decon staging area. Decontaminate per instructions above. Then proceed to the next soil sampling location.

# APPENDIX D

# COMMUNITY AIR MONITORING PLAN

DRAFT

**New York State Department of Health Generic Community Air Monitoring Plan**

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area and when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH. Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

**Community Air Monitoring Plan**

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

**Continuous monitoring will be required for all ground intrusive activities and during building slab demolition.** Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

**Periodic monitoring** for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

**VOC Monitoring, Response Levels, and Actions**

Volatile organic compounds (VOCs) must be monitored at the downwind and upwind perimeter of the immediate work area (i.e., the exclusion zone) on a **continuous** basis. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of

calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.

- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less – but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

**Particulate Monitoring, Response Levels, and Actions**

Particulate concentrations should be monitored **continuously** at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m3 above the upwind level and provided that no visible dust is migrating from the work area.

- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m3 of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

**Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures**

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.

- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m3, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m3 or less at the monitoring point.

- Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

Special Requirements for Indoor Work with Co-Located Residences or Facilities

Unless a self-contained, negative-pressure enclosure with proper emission controls will encompass the work area, all individuals not directly involved with the planned work must be absent from the room in which the work will occur. Monitoring requirements shall be as stated above under “Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures” except that in this instance “nearby/occupied structures” would be adjacent occupied rooms. Additionally, the location of all exhaust vents in the room and their discharge points, as well as potential vapor pathways (openings conduits, etc.) relative to adjoining rooms, should be understood and the monitoring locations established accordingly. In these situations, it is strongly recommended that exhaust fans or other engineering controls be used to create negative air pressure within the work area during remedial activities. Additionally, it is strongly recommended that the planned work be implemented during hours (e.g. weekends or evenings) when building occupancy is at a minimum.